

TESTED DIFFERENCES IN ACHIEVEMENT, PERSONALITY, INTELLIGENCE
AND "SCHOOL MARKS" BETWEEN TRANSPORTED AND NON-TRANSPORTED
PUPILS OF LYLES ELEMENTARY SCHOOL, CEDAR HILL ELEMEN-
TARY SCHOOL AND CEDAR HILL HIGH SCHOOL, CEDARTOWN,
GEORGIA

A THESIS
SUBMITTED TO THE FACULTY OF THE SCHOOL OF EDUCATION, ATLANTA
UNIVERSITY IN PARTIAL FULFILLMENT OF THE REQUIREMENTS
FOR THE DEGREE OF MASTER OF ARTS

BY
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SCHOOL OF EDUCATION
ATLANTA UNIVERSITY
ATLANTA, GEORGIA
MAY 1960

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ACKNOWLEDGMENTS

The writer wishes to express her sincere thanks and appreciation to all who have contributed to the successful completion of this study. She wishes to express direct thanks to Dr. Laurence E. Boyd and Dr. Lynette Saine, adviser and co-adviser, respectively, and to her parents, husband and her husband's parents whose understanding and encouragement throughout the period of her graduate study have made significant contributions to her success.

E. M. M.

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CHAPTER I

INTRODUCTION

Rationale.--During the past century at least three clearly identifiable factors have been involved in changing many of the fundamental habits, customs, ideas, and economic activities of traditional rural life. These factors may be designated as industrial development and commercialization, urbanization, and technological advance.¹

Rural life is changing, these changes are creating new problems of living, many of which should be the concern of the school. As a result, our conception as to what the rural school should be and do is also changing.

Improved roads and motor vehicles have for practical purposes eliminated the chief disadvantages of rural isolation. They have caused the decline of thousands of neighborhoods and communities and resulted in establishing or strengthening thousands of others. They have made possible the transportation of over 5 million pupils, mostly rural, daily to better schools. Pupils transportation has made possible a revolution in organization of rural and village schools, a revolution that is rapidly taking place.²

¹ Paul H. Johnson, "Old Ideas Versus New Ideas in Farm Life," Year Book of Agriculture (1940) p. 139.

² Julian E. Butterworth and Howard A. Dawson, The Modern Rural School (New York: McGraw Hill Book Company, 1952),

One of the most significant changes occurring in rural education is the consolidation of smaller school units into larger ones. The consolidation of smaller school units into larger units has made it possible for schools to extend their curricula, and better utilize their buildings and school personnel. Expanded facilities in terms of buildings, equipment, curriculum, and teaching personnel have made it possible for many children living in small communities or isolated rural areas to have the advantage of modern schools.¹

While the consolidation of schools has mitigated to some extent the problems of inadequate facilities, equipment and personnel, it has also created new problems. One pressing problem created by school consolidation is that of providing transportation for children who do not live within walking distance of the school. As of 1954, it was estimated that more than one-fourth of public pupils of the United States ride the bus to and from school.²

Transportation of pupils to and from school has presented the administration and teaching in consolidated schools with new problems. Some problems related to pupils' transportation are personality and achievement. Because transportation is a relatively new activity, research on its various problems is needed even more

¹ Robert M. Ilsenberg, "Extended Use of Busses," Nation's Schools, VII, No. 3(1953), pp. 75-79.

² W. H. Hanger, "Make the most of School Bus Time," N. E. A. Journal, XLIII(1954), p. 173.

than in some other phases of a school system.

The pupil population in consolidated schools is made up of children from the town and rural areas. It should be interesting to discover the differences, if any, in the personality make-up between town and rural pupils attending the same school. Pupils living a considerable distance away from the school spend between ten and fifteen hours weekly going to and from school.

The transportation of school pupils has become a school service of major proportion within the last 25 years. Since it is so different in many respects from most programs with which schools have had prior experience, it has offered opportunity for much variation and experimentation. This variation and experimentation have extended into the operations of state departments of education. Their experiences are now extensive enough to provide a basis for judgments on ways in which these departments can more effectively contribute to the improvement of this school service.¹

Pupil transportation now is one of the more important auxiliary services of the public schools. This service has attained its present importance and size during the last 25 years.

A comparison of the Office of Education is on pupil transportation for 1920 with those of 1956 indicate the significant changes to follow. In 1920, 356,000 pupils, 1.7 per cent of the total enrollment, were carried to and from school at public expense, but

¹
E. Glenn Featherstone and Will F. Robert. "Pupils' Transportation Responsibilities," The Education Digest (December, 1956), p. 36.

in 1956, 10.2 million pupils, 30 per cent of total enrollment, were carried to and from school at public expense. Today, 10 states provide transportation for more than one-third of their pupil populations, 20 per cent for more than one-fourth and the remainder for more than one-tenth.

Probably the only people involved in pupil transportation in the early days of this service were the contractor and the school administrator or board member who represented the school in making the contract. Today the picture is radically different. First, the picture of the most widely accepted concept of pupil transportation is that it is an essential and integral part of the school program and just as much the responsibility of the administrator as is the instructional program or the providing of adequate school plant facilities. Second, there has been a definite shift¹ away from contract service to school operated service.

School transportation in this country has been described as 'big business.' And so it is, because it takes about five cents of every school dollar and required the operation of approximately 160,000 motor vehicles.

It is "big education," too, since it embraces this year an estimated 11 million pupils of the public elementary and secondary² schools.

¹ William McKillop, "School Bus Programs - How They Grew," The Nation's Schools (August, 1958), p. 38.

² Marian Telford, "The Next Ten Years," The Nation's Schools (August, 1958), p. 33.

Evolution of the Problem.--In the last ten years, thousands of consolidated schools have been established. The consolidation of schools has brought about many problems concerning the transportation of pupils. It involved children traveling long distances to and from school on school busses. It has changed the living habits of the pupils. The writer believes that this problem has caused some pupils to develop emotional problems and a decrease in pupils' achievement. In order to seek an answer to this problem, the writer felt the necessity of this study. In addition, the writer works in a consolidated school and has witnessed the disruptions in school programs and pupil activities caused by transportation problems.

Contribution of Educational Knowledge.--It is hoped that the findings of this study will be valuable to school administrators; for these data should reveal the probable extent to which the school achievement and personality development of school pupils are adversely affected by transportation.

Statement of the Problem.--The problem involved in this study was to determine the differences, if any, between transported and non-transported pupils with reference to certain selected factors, namely: personality traits, achievement test, intelligence and school grades. Further, the problem of this research was to determine the extent to which transportation appears to influence pupil achievement and development.

Limitation of the Study.--This study was limited to the seventh, ninth, and eleventh grades of the Lyles Elementary School,

Cedar Hill Elementary School and Cedar Hill High School in Cedartown, Georgia.

A more significant limitation of this research lies in the inherent difficulty in determining the facilitating or inhibiting influences upon pupil learning and development occasioned by transportation to and from school.

Purpose of the Study.--The main purpose of this study was to get a comprehensive picture of the status and differences, if any, of the personality traits, intelligence, school achievement, and test performance of the transported and non-transported pupils in the Lyles Elementary School, Cedar Hill Elementary School, and the Cedar Hill High, Cedartown, Georgia, 1959-1960.

The specific purpose of this study were as follows:

1. To determine to the range, measures of central tendency and variability of intelligence, achievement, and personality for the respective groups of transported and non-transported of seventh, ninth, and eleventh graders in the Lyles Elementary School, Cedar Hill Elementary School, and Cedar Hill High School, Cedartown, Georgia, 1959-1960.
2. To determine the difference, if any, in intelligence of transported and non-transported seventh, ninth, and eleventh grade pupils of the Lyles Elementary School, Cedar Hill Elementary School, and Cedar Hill High School, Cedartown, Georgia, 1959-1960.
3. To determine the difference, if any, in achievement of the transported and non-transported seventh, ninth, eleventh grade pupils of the Lyles Elementary School, Cedar Hill Elementary School, Cedar Hill High School, Cedartown, Georgia, 1959-1960.
4. To determine the differences, if any, in personality of the transported and non-transported pupils in the Lyles Elementary School, Cedar Hill Elementary School, and Cedar Hill High School, Cedartown, Georgia, 1959-1960.

5. To formulate whatsoever implications for educational theory and practices as may be derived from the analysis and interpretation of the data on the transported and non-transported pupils in Lyles Elementary School, Cedar Hill Elementary School, and Cedar Hill High School, Cedartown, Georgia, 1959-1960.

Period of the Study.--This study was conducted during the second semester of the 1959-1960 school year.

Locale of the Study.--The Lyles Elementary School, Cedar Hill Elementary School, and Cedar Hill High School, Cedartown, Georgia was the locale of this study.

The Lyles Elementary School is composed of nine teachers and two hundred and fifty pupils who are transported daily. It is under the control of the Polk County Board of Education.

The Cedar Hill Elementary School is composed of eight teachers and two hundred and forty pupils who reside in the city of Cedartown. It is under the control of the Cedartown Board of Education.

The Cedar Hill High School is composed of ten teachers and two hundred and sixty students of which half of them are transported. It is also under the control of the Cedartown Board of Education.

Method of Research and Procedure.--Descriptive-Survey Method of research, employing test scores, school marks, and statistical analysis were used to collect the data needed. The data was gathered, described, and presented as indicated in the following operational steps:

1. The related literature was reviewed.
2. Permission to do this study was obtained.
3. The three tests: California Achievement, California

Personality, and Intelligence were administered.

4. The average of "teachers marks" were computed.
5. Statistical measures to be used in this study were mean, median, standard deviation, standard error of the mean, and the t-score.
6. The findings as developed through this analysis of the data were incorporated into the thesis copy.
7. The conclusions, implications, recommendations formulated through the interpretation of the data was incorporated in the final thesis copy.

Description of Subjects.--The subjects for this study were the seventh, ninth, and eleventh graders, identified as transported and non-transported, enrolled in the Lyles Elementary School, Cedar Hill Elementary School, and Cedar Hill High School, Cedartown, Georgia.

Description of Instruments.--The ages of the subjects ranged from ten years of age to twenty years of age. The instruments to be used in this study were selected to reveal substantiating evidence of the purpose for which the study is to be made.

1. California Achievement Test.--This instrument is used for accurately and objectively measuring pupil's achievement in the fundamental skills. It is standardized and each item has been selected for its diagnostic value.
2. California Personality Test.--This test is organized around the concept of Adjustment as a balance between personal and social adjustment. The test is divided into two categories: personal adjustment and social adjustment.
3. California Intelligence Test.--This instrument measures the traits and mental development of an individual. It is standardized and each item has been selected for its diagnostic value.

Related Literature.--During the past century, at least, three

clearly identifiable factors have been involved in changing many of the fundamental habits, customs, ideas, and economic activities of traditional rural life. These factors may be designated as industrial development and commercialization, urbanization, and technological advance.¹

Rural life is changing. These changes are creating new problems of living, many which should be the concern of these schools. As a result, our conception as to what the rural school should be and do is also changing.

Improved roads and motor vehicles have for practical purposes eliminated the chief disadvantages of rural isolation. They have caused the decline of thousands of neighborhoods and communities and have resulted in establishing or strengthening thousands of others. They have made possible the transportation of over 5 million pupils, mostly rural, daily to better schools. Pupil transportation has made possible a revolution in organization of rural and village schools, a revolution that is rapidly taking place.²

One of the most significant changes occurring in rural education is the consolidation of smaller school units into large ones. The consolidation of small school units into larger units has made it possible for schools to extend their curricula, and

¹
Paul H. Johnstone, op. cit., p. 139.

²
Julian E. Butterworth, et al., op. cit., p. 39.

better utilize their buildings, equipment, curriculum, and teaching personnel, and have made it possible for many children living in small communities of isolated rural areas to have the advantage¹ of modern schools.

While the consolidation of schools has mitigated to some extent the problems of inadequate facilities, equipment and personnel. It also created new problems. One pressing problem created by school consolidation is that of providing transportation for children who do not live within walking distance of the school. As of 1954, it was estimated that more than one-fourth of school pupils of the United States ride the bus to and from² school..

Personality is that dynamic organization within the individual of those psychological system that determines his unique adjustments³ to his environment.

Intelligence is the general capacity of an individual consciously to adjust his thinking to new requirements.⁴

Probably the only people involved in pupil transportation in

¹ Robert M. Isenberg, op. cit., pp. 75-79.

² W. H. Hanger, op. cit., p. 173.

³ A. R. Mangus, "Personality Adjustment of Rural and Urban Children," American Sociological Review, 13:566(October, 1948).

⁴ Henry W. Goddard, "What is Intelligence," Journal of Psychology, Vol. 42, No. 1(January, 1947), pp. 56-57.

the early days of their service where the contractor and the school administrator or board member who represented the school in making contact. Today the picture is radically different. First, the picture of the most widely accepted concept of pupils' transportation is that it is an essential and integral part of the school program and just as much the responsibility of the administrator as is the instructional program or the providing of adequate school plant facilities.¹

Some authoritative statements relative to achievement, personality, and intelligence of rural pupils follow:

Children from rural backgrounds always score poorly on tests of intelligence. Moreover, many items of the average intelligence test are based on experiences one has in a city but does not have in the country.²

School achievement of pupils in rural schools, as measured by standardized tests, is less satisfactory than that of the city school pupils. The size of the school and the length of the term seem to cause some difference.³

Kyte reports that, in general the age-grade status of the rural school child who continues in school is relatively the same as that of the child in the city school. In the middle elementary grades, there is a larger percentage of over-age children than in

¹ William McKillop, op. cit., p. 38.

² Luella Cole, Psychology of Adolescence (New York: 1951), p. 42.

³ George C. Kyte, "Pupil Status in Rural Elementary Schools," National Society for the Study of Education. Thirteenth Yearbook, Part VII (Bloomington), III, 1931, pp. 51-52.

the city schools. The rural school teachers tend to promote a small percentage of their pupils than do the city teachers. The greatest difference occurring in the first, seventh, and eighth grades. Mental age of the rural first grade children are slightly lower than for those of the urban first grade. In the first two grades the average child's intelligence quotient in the rural school is slightly lower than that of the average child in the corresponding grade school in the city.¹

Summary of Literature.--The literature seems to indicate that the transportation of pupils is big business. One of the most significant changes occurring in rural education is the consolidation of smaller school units into larger ones. While the consolidation of school has mitigated to some extent, the problems of inadequate facilities, equipment and personal, it has also created new problems. One pressing problem created by school consolidation is that of providing transportation for children who do not live within distance of the school. As of 1954, it was estimated that more than one-fourth of public pupils of the United States ride the bus to and from school. Because transportation is a relatively new activity, research on its various problems is needed even more than in some other phases of a school system. The transportation of school pupils has become a school service, a major proportion within the last 25 years.

¹

George C. Kyte, op. cit., p. 92.

Since it is so different in many respects from most programs with which schools have had prior experience, it has offered opportunity for much variation and experimentation.

In 1920, 356,000 pupils, 1.7 per cent of the total enrollment, were carried to and from school at public expense, but in 1956, 10.2 million pupils, 30 per cent of total enrollment, were carried to and from school at public expense.

School transportation in this country has been described as "big business." And so it is, because it takes about five cents of every school dollar and required the operation of approximately 160,000 motor vehicles.

It is "big education", too, since it embraces this year an estimated 11 million pupils of the public elementary and secondary schools.

CHAPTER II

PRESENTATION AND INTERPRETATION OF DATA

Organization and Treatment of Data.--The data obtained from analysis of records and test results of sixty-four transported and sixty-one non-transported pupils, a total of one hundred and twenty-five subjects of Lyles Elementary School, Cedar Hill Elementary School and Cedar Hill High School, Cedartown, Georgia for the school year, 1959-1960 are presented in tabular form in this chapter.

For the purpose of comparison, all data were analyzed for each of the following groups: (1) The "school marks" obtained in each subject-matter field by the transported and non-transported. (2) The personal traits of the transported and non-transported. (3) The achievement test results of transported and non-transported. (4) The related social studies and science results of transported and non-transported.

The mean differences between the group of transported and non-transported in each subject matter field and personality, "school marks" were calculated and treated for significance by the use of the standard error of the statistics involved in each comparison of data.

The null hypothesis that no real difference existed between the transported and non-transported in "school marks," personality and achievement results was set up. This hypothesis was tested statistically for significance by Fisher "t" at the two per cent

level of confidence and the requisite degrees of freedom valid for each comparison of data.

The writer accepted the reliability of statistics that proved significant at or beyond the two per cent level of confidence. The degree of reliability was chosen so that at least ninety-eight times out of every hundred, results would probably be correct and only twice out of every hundred would there be a probability¹ of results being wrong. The criterion of the reliability which was decided upon as a "t" of 2.41 at 45 degrees of freedom at the 2 per cent level of confidence as used in the computations leaves no doubt of the validity of significant statistics reported.

The discussion of the data in this chapter will be presented in the order of the captions to follow: (a) Achievement Test Results, (b) Personality Test Results, (c) Intelligence and (d) "School Marks".

California Test Results in Reading, Seventh Grades

Transported.⁴²The data on the results on the California Tests as revealed by scores obtained by the group of pupils of the seventh, ninth and eleventh grades of Lyles Elementary School, Cedar Hill Elementary School and Cedar Hill High School. For the transported seventh grade in reading, a median score was 5.4, a mean score of 5.6, a standard deviation of .67 and a standard error of the mean of .11.

1

Henry E. Garrett, Statistics in Psychology and Education, (New York, 1953), pp. 190-194.

TABLE 1

DISTRIBUTION OF THE GRADE PLACEMENTS ON THE CALIFORNIA TEST
OF ACHIEVEMENT (READING) AS OBTAINED BY THE SEVENTH
GRADE PUPILS OF LYLES ELEMENTARY SCHOOL AND
CEDAR HILL ELEMENTARY SCHOOL, CEDARTOWN,
GEORGIA

Transported		Non-transported	
Number		Number	
1	8.0	1	9.6
2	7.4	2	9.1
3	7.2	3	8.7
4	6.7	4	8.2
5	6.4	5	7.1
6	6.3	6	7.0
7	6.2	7	6.9
8	6.0	8	6.6
9	5.8	9	6.6
10	5.7	10	6.5
11	5.7	11	6.4
12	5.7	12	6.4
13	5.6	13	6.4
14	5.6	14	6.2
15	5.4	15	5.7
16	5.4	16	5.6
17	5.4	17	5.5
18	5.3	18	5.5
19	5.3	19	5.4
20	5.3	20	5.3
21	5.2	21	5.3
22	5.2	22	4.9
23	5.2	23	4.9
24	5.1	24	4.9
25	5.1	25	4.7
26	5.0	26	4.7
27	5.0	27	4.5
28	4.9	28	4.1
29	4.9		
30	4.9		
31	4.8		
32	4.7		
33	4.6		
34	4.5		
Median	5.4		6.2
Mean	5.6		5.8
S.D.	.67		1.28
S.E.M.	.11		.24

Comparative Data in Reading and "t" Ratio.--As indicated in Table 2, it was found that the transported pupils in reading are two years and three months behind the national norm. The median for transported was 5.4, a mean of 5.6, a standard deviation of .67 and a standard error of the mean of .11. The non-transported pupils in reading are a year and five months behind the national norm.

Non-transported.--The median for non-transported was 6.2, a mean of 5.8, a standard deviation of 1.28 and a standard error of the mean of .24. There was no significant difference between transported and non-transported pupils. The standard error of the two means was .26, the difference of the two means was .2 and the "t" score was .77.

TABLE 2

COMPARISON OF DATA BY SEVENTH GRADES TRANSPORTED AND NON-TRANSPORTED PUPILS IN READING IN LYLES ELEMENTARY SCHOOL AND CEDAR HILL ELEMENTARY SCHOOL
CEDARTOWN, GEORGIA

Group	Reading	Mean	Sigma	S.E.M.	Diff. of mean	"t"
Transported	Achievement in Reading	5.6	.67	.11		
					.26	.2
Non-transported		5.8	1.28	.24		.77

California Achievement Test Results in Arithmetic,
Seventh Grade

Transported.--The measures obtained by the transported seventh

grade in arithmetic - a median score of 5.3, a mean score of 5.5, standard deviation of .80 and a standard error of the mean of .14.

Non-transported.--The median score, 5.7, a mean score of 5.9, a standard deviation of 1.18 and a standard error of the mean of .22.

TABLE 3

CALIFORNIA ACHIEVEMENT TEST, ARITHMETIC GRADE PLACEMENT
SEVENTH GRADE OF LYLES ELEMENTARY SCHOOL AND CEDAR
HILL ELEMENTARY SCHOOL, CEDARTOWN, GEORGIA

Transported		Non-transported	
Number		Number	
1	7.3	1	8.7
2	6.7	2	8.0
3	6.6	3	7.5
4	6.4	4	7.3
5	6.3	5	7.0
6	6.3	6	7.0
7	6.3	7	6.9
8	6.3	8	6.7
9	6.1	9	6.5
10	6.0	10	6.4
11	6.0	11	6.3
12	6.0	12	5.7
13	6.0	13	5.7
14	5.9	14	5.6
15	5.6	15	5.5
16	5.5	16	5.2
17	5.3	17	5.1
18	5.3	18	5.1
19	5.3	19	5.0
20	5.3	20	4.9
21	5.3	21	4.8
22	5.2	22	4.8
23	5.0	23	4.7
24	4.9	24	4.6
25	4.9	25	4.5
26	4.9	26	4.5
27	4.9	27	4.2
28	4.8	28	4.2
29	4.7		

Table 3 cont'd.

Transported		Non-transported	
	Number		Number
30	4.6		
31	4.6		
32	4.4		
33	4.1		
34	4.0		
Median	5.3		5.7
Mean	5.5		5.9
S.D.	.80		1.18
S.E.M.	.14		.22

TABLE 4

COMPARISON OF DATA BY SEVENTH GRADES, TRANSPORTED AND NON-TRANSPORTED PUPILS IN ARITHMETIC OF LYLES ELEMENTARY SCHOOL AND CEDAR HILL ELEMENTARY SCHOOL IN CEDARTOWN, GEORGIA

Group	Arithmetic	Mean	Sigma	S.E.M.	Sigma $m_1 m_2$	Diff of mean	"t"
Transported	Achievement in Arithmetic	5.5	.80	.14			
					.26	.4	1.54
Non-Transported		5.9	1.18	.22			

California Test Results in Language in Seventh Grades

Transported.--For the transported seventh grade in language the following measures were obtained: a median score of 4.5, a mean score of 5.09, a standard deviation of 1.27 and a standard

TABLE 5

CALIFORNIA ACHIEVEMENT TEST, GRADE PLACEMENTS IN LANGUAGE,
SEVENTH GRADE OF LYLES ELEMENTARY SCHOOL AND CEDAR
HILL ELEMENTARY SCHOOL, CEDARTOWN, GEORGIA

Transported		Non-transported	
Number		Number	
1	8.0	1	9.6
2	6.9	2	9.0
3	6.8	3	8.8
4	6.4	4	7.1
5	6.4	5	6.7
6	6.4	6	6.5
7	6.2	7	6.2
8	6.0	8	5.9
9	6.0	9	5.9
10	5.9	10	5.6
11	5.9	11	5.3
12	5.3	12	5.2
13	5.1	13	5.2
14	4.9	14	5.0
15	4.7	15	4.8
16	4.6	16	4.7
17	4.5	17	4.6
18	4.5	18	4.6
19	4.3	19	4.5
20	4.3	20	4.5
21	4.2	21	4.4
22	4.2	22	4.1
23	4.1	23	3.8
24	4.0	24	3.7
25	3.9	25	3.5
26	3.9	26	3.2
27	3.9	27	2.3
28	3.9	28	2.0
29	3.7		
30	3.7		
31	3.6		
32	3.5		
33	3.5		
34	3.4		
Median	4.5		4.9
Mean	5.09		5.2
S.D.	1.27		1.81
S.E.M.	.22		.34

error of the mean of .22.

Non-transported.--For the seventh grade non-transported pupils, the measures obtained a median score of 4.9, a mean score of 5.2, a standard deviation of 1.81 and a standard error of the mean of .34.

Comparative Data and "t" Ratio as Indicated in Table 4,
Arithmetic.--It was found that the seventh grade transported pupils in arithmetic are two years and four months below the national norm; a median of 5.3, a mean of 5.5, a standard deviation of .80 and a standard error of the mean of .14. The non-transported seventh grade pupils in arithmetic are two years below the national norm; a median of 5.7, a mean of 5.9, a standard deviation of 1.18 and a standard error of the mean of .22. There was no significant difference between transported and non-transported pupils. The difference between the two means was .26, the differences between the means were .4 and a "t" score of 1.54.

Comparative Data and "t" Ratio as Indicated in Table 5,
(Language).--It was found that the seventh grade transported pupils were two years below the national norm in language: a median of 4.5, a mean of 5.0, a standard deviation of 1.27, and a standard error of the mean of .22. The non-transported seventh grade pupils were one year and eight months below national norm: a median of 4.9, a mean of 5.2, a standard deviation of 1.81 and a standard error of the mean of .34. There was no significant difference between the transported and non-transported pupils.

The difference between the two means was .26, the difference between the means were .4 and a "t" score of 1.54.

TABLE 6

COMPARISON OF DATA OBTAINED BY THE SEVENTH GRADE, TRANSPORTED AND NON-TRANSPORTED PUPILS IN LANGUAGE OF LYLES ELEMENTARY SCHOOL AND CEDAR HILL ELEMENTARY SCHOOL, CEDARTOWN, GEORGIA

Group	Language	Mean	Sigma	S.E.M.	Sigma $m_1 m_2$	Diff. of Mean	"t"
Transported	Achievement in Language	5.0	1.27	.22	.41	.11	.27
Non-transported		5.2	1.81	.34			

California Achievement Results Obtained From
Total Test, Seventh Grades

The measures were obtained by the seventh grade total tests, a median score of 5.2, a mean score of 5.3, a standard deviation of .79 and a standard error of the mean of .14. The non-transported measures obtained by the seventh grade total tests results: a median of 5.5, a mean of 5.7, a standard deviation of 1.46 and a standard error of the mean of .28.

Comparative Data and "t" Ratio as Indicated in Table 8.--It was found that the transported seventh grade pupils were two years and four months below the national norm for the total test, a median of 5.2, a mean of 5.3, a standard deviation of .79 and a standard error of the mean of .14. The non-transported seventh

TABLE 7

CALIFORNIA ACHIEVEMENT TEST TOTAL TEST GRADE PLACEMENT
SEVENTH GRADES, LYLES ELEMENTARY SCHOOL AND
CEDAR HILL ELEMENTARY SCHOOL
CEDARTOWN, GEORGIA

Transported		Non-transported	
Number		Number	
1	7.2	1	9.1
2	6.9	2	8.9
3	6.8	3	8.1
4	6.6	4	7.7
5	6.3	5	6.6
6	6.3	6	6.3
7	6.0	7	6.3
8	6.0	8	6.3
9	5.9	9	6.1
10	5.7	10	6.1
11	5.7	11	5.7
12	5.6	12	5.6
13	5.4	13	5.5
14	5.3	14	5.5
15	5.3	15	5.5
16	5.2	16	5.2
17	5.2	17	5.1
18	5.1	18	5.1
19	5.0	19	5.1
20	4.9	20	5.0
21	4.9	21	4.9
22	4.9	22	4.8
23	4.8	23	4.8
24	4.8	24	4.7
25	4.8	25	4.0
26	4.8	26	3.8
27	4.7	27	3.8
28	4.7	28	3.2
29	4.6		
30	4.5		
31	4.4		
32	4.4		
33	4.4		
34	4.3		
Median	5.2		5.5
Mean	5.3		5.7
S.D.	.79		1.46
S.E.M.	.14		.28

grade pupils were two years below the national norm for total test, a median of 5.5, a mean of 5.7, a standard deviation of 1.46 and a standard error of the mean of .28. There was no significant difference between the transported and non-transported pupils, a difference of mean of .4, a standard deviation of two means of .31, and a "t" score of 1.29.

TABLE 8

COMPARISON DATA OBTAINED BY SEVENTH GRADE, TRANSPORTED
AND NON-TRANSPORTED TOTAL TEST, LYLES ELEMEN-
TARY SCHOOL AND CEDAR HILL ELEMENTARY
SCHOOL, CEDARTOWN, GEORGIA

Group	Total Test Achievement	Mean	Sigma	S.E.M.	Sigma $m_1 m_2$	Diff. of Mean	"t"
Transported	Achieve- ment Test	5.3	.79	.14	.31	.4	1.29
Non- transported		5.7	1.46	.28			

Intelligence Scores Obtained by Lyles Elementary
School and Cedar Hill Elementary School

Transported Pupils.--The transported seventh grade intelligence, the measures were obtained: a median score of .80, a mean score of .78, a standard deviation of 5.54 and a standard error of the mean of .95.

Non-Transported Pupils.--The non-transported seventh grade intelligence, the measures obtained: a median score of .85, a mean of .86, standard deviation of 7.13 and a standard error of the mean of 1.35.

TABLE 9

INTELLIGENCE QUOTIENTS OF THE SEVENTH GRADES OF LYLES
ELEMENTARY SCHOOL AND CEDAR HILL ELEMENTARY
SCHOOL, CEDARTOWN, GEORGIA

Transported		Non-transported	
	Number		Number
1	96	1	105
2	93	2	105
3	93	3	101
4	89	4	93
5	89	5	89
6	89	6	89
7	89	7	89
8	85	8	89
9	85	9	89
10	85	10	85
11	85	11	85
12	85	12	85
13	80	13	85
14	80	14	85
15	80	15	85
16	80	16	80
17	80	17	80
18	80	18	80
19	80	19	80
20	80	20	80
21	80	21	80
22	80	22	80
23	80	23	80
24	80	24	80
25	80	25	80
26	80	26	80
27	80	27	80
28	80	28	80
29	80		
30	80		
31	80		
32	80		
33	80		
34	80		
Median	80		.85
Mean	78		.86
S.D.	5.54		7.13
S.E.M.	.95		1.35

Comparative Data and "t" Ratio as Indicated in Table 10.--The intelligence of the seventh grade transported pupils is very low or dull, a median score of 80, a mean score of 78, a standard deviation of 5.54 and a standard error of the mean of .95. The intelligence of the seventh grade non-transported pupils is below normal, a median of 85, a mean of 86, a standard deviation of 7.13 and a standard error of the mean of 1.35. There is a significant difference in favor of the non-transported pupils on intelligence. On intelligence, a standard deviation of the mean of 1.65, a difference of the mean of 8.00 and a "t" score of 4.85.

TABLE 10

COMPARISON OF DATA OBTAINED BY SEVENTH GRADE, TRANSPORTED
AND NON-TRANSPORTED PUPILS IN INTELLIGENCE OF
LYLES ELEMENTARY SCHOOL AND CEDAR HILL
ELEMENTARY SCHOOL, CEDARTOWN, GEORGIA

Group	Intelli- gence	Mean	Sigma	S.E.M.	Sigma $m_1 m_2$	Diff.of Mean	"t"
Transported	Intelli- gence	78	5.54	.95			
					1.65	8.00	4.85
Non- transported		86	7.13	1.35			

Transported.--The results obtained from the California Related Science and Social Studies by the transported seventh grade are as follows: the measures were obtained Part I People of Other Times, median of 19, a mean of 18, the standard deviation of 6.28 and a standard error of the mean of 1.08. Part I American Heritage,

median of 32.3, a mean of 32, a standard deviation of 6.45 and a standard error of the mean of 1.10. Part II Geography, a median of 31.5, a mean of 32, standard deviation of 8.50 and a standard error of the mean of 1.46. Part II Basic Social Process, a median score of 23, a mean score of 24, standard deviation of 6.38, and a standard error of the mean of 1.09. Part III Health and Safety, a median of 33, a mean of 35, standard deviation of 8.60 and a standard error of the mean of 1.48. Part III Elementary Science, a median of 29, a mean of 29, a standard deviation of 7.45 and a standard error of the mean of 1.28.

Non-transported.--The results obtained from the California Related Science and Social Studies by the seventh grade non-transported are as follows: the measures were

Part I People of Other Lands, a median of 19.00, a mean of 19.05, a standard deviation of 6.82 and a standard error of the mean of 1.29.

Part I American Heritage, a median score of 30.52, a mean score of 31.79, standard deviation of 11.57 and a standard error of the mean of 2.19.

Part II Geography, a median score of 30.00, a mean score of 30.64, a standard deviation of 12.53, a standard error of the mean of 2.37.

Part II Basic Social Processes, a median score of 23.50, a mean of 24.34, a standard deviation of 10.64, and a standard error of the mean of 2.01.

TABLE 11

CALIFORNIA RELATED SOCIAL AND SCIENCE STUDIES TEST PART I
 TEST 1, LYLES ELEMENTARY SCHOOL AND CEDAR HILL
 ELEMENTARY SCHOOL, CEDARTOWN, GEORGIA

Transported		Non-transported	
Number		Number	
1	28	1	62
2	27	2	52
3	27	3	50
4	25	4	48
5	24	5	43
6	23	6	42
7	23	7	38
8	22	8	37
9	21	9	36
10	21	10	34
11	21	11	33
12	21	12	33
13	21	13	31
14	20	14	31
15	20	15	30
16	20	16	30
17	19	17	29
18	19	18	29
19	19	19	28
20	18	20	23
21	18	21	23
22	17	22	21
23	17	23	20
24	16	24	20
25	16	25	17
26	15	26	17
27	15	27	17
28	14	28	16
29	14		
30	13		
31	13		
32	8		
33	7		
34	0		
Median	19		30.5
Mean	18		31.79
S.D.	6.28		11.57
S.E.M.	1.08		2.19

Part III Health and Safety. A median score of 41.00, a mean score of 41.32, a standard deviation of 11.73 and a standard error of the mean of 2.22.

Part III Elementary Science. A median score of 28.00, a mean score of 30.10, a standard deviation of 9.55 and a standard error of the mean of 1.81.

Comparative Data and "t" Ratio as Indicated in Table 12.--It was found that on the California Social and Related Science Part I Test I, the seventh grade transported pupils were at one percentile, a median of 19, a mean of 18, a standard deviation of 6.28 and the standard error of the mean of 1.08. The non-transported, on California Social and Related Science Part I Test I, American Heritage, pupils were at the two percentile, a median of 30.5, a mean of 31.79, a standard deviation of 11.57, a standard error of the mean of 2.19. There is significant difference in favor of the mean of 2.44, a difference of mean of 13.79, a "t" score of 5.65.

TABLE 12

COMPARISON OF DATA OBTAINED BY THE SEVENTH GRADE TRANSPORTED
AND NON-TRANSPORTED IN SOCIAL STUDIES, PART I TEST I
LYLES ELEMENTARY SCHOOL AND CEDAR HILL ELEMENTARY
SCHOOL, CEDARTOWN, GEORGIA

Group	Social Studies	Mean	Sigma	S.E.M.	Sigma $m_1 m_2$	Diff.of Mean	"t"
Transported		18	6.28	1.08			
					2.44	13.79	5.65
Non- transported		31.79	11.57	2.19			

TABLE 13

CALIFORNIA RELATED SOCIAL AND SCIENCE STUDIES TEST, PART I
 TEST II, LYLES ELEMENTARY SCHOOL AND CEDAR HILL
 ELEMENTARY SCHOOL, CEDARTOWN, GEORGIA

Transported		Non-transported	
Number		number	
1	53	1	36
2	41	2	34
3	40	3	30
4	39	4	28
5	38	5	23
6	37	6	23
7	37	7	22
8	36	8	22
9	36	9	21
10	36	10	21
11	35	11	21
12	35	12	21
13	35	13	20
14	33	14	19
15	33	15	19
16	33	16	18
17	33	17	18
18	32	18	18
19	32	19	18
20	32	20	17
21	31	21	17
22	31	22	16
23	30	23	16
24	29	24	15
25	28	25	12
26	27	26	8
27	27	27	0
28	26	28	0
29	25		
30	25		
31	25		
32	24		
33	21		
34	20		
Median	32.5		19.00
Mean	32		19.05
S.D.	6.45		6.82
S.E.M.	1.10		1.29

Comparative Data and "t" Ratio as Indicated in Table 14.--It was found that the seventh grade transported pupils on the California Social and Related Science Test, Part I Test II, Peoples of Other Lands and Times, were at the two percentile, a median score of 32.5, a mean of 32, a standard deviation of 6.45, and a standard error of the mean of 1.10. The non-transported pupils the the California Social and Related Science Test, Part I Test II, Peoples of Other Lands and Times were at the one percentile, a median of 19, a mean of 19.05, a standard deviation of 6.82 and a standard error of the mean of 1.29. A significant difference in favor of transported pupils, a standard deviation of two means 1.70, a difference of the mean of 12.95 and a "t" score of 7.62.

TABLE 14

COMPARISON DATA OBTAINED BY THE SEVENTH GRADE TRANSPORTED AND NON-TRANSPORTED PUPILS IN SOCIAL STUDIES, PART I TEST II
LYLES ELEMENTARY SCHOOL AND CEDAR HILL ELEMENTARY
SCHOOL, CEDARTOWN, GEORGIA

Group	Social Studies	Mean	Sigma	S.E.M.	Sigma $m_1 m_2$	Diff.of Mean	"t"
Transported	Social Studies	32	6.45	1.10			
					1.70	12.95	7.62
Non- transported		19.05	6.82	1.29			

Comparative Data and "t" Ratio as Indicated in Table 16.--

It was found that on the California Social and Related Science Test, Part II Test I Geography, the seventh grade transported

TABLE 15

CALIFORNIA RELATED SOCIAL AND SCIENCE TEST, SEVENTH GRADE
 PART II, TEST I, LYLES ELEMENTARY SCHOOL AND
 CEDAR ELEMENTARY SCHOOL, CEDARTOWN, GEORGIA

Transported		Non-transported	
Number		Number	
1	58	1	66
2	48	2	62
3	43	3	50
4	40	4	44
5	40	5	41
6	39	6	36
7	39	7	36
8	39	8	34
9	37	9	33
10	37	10	33
11	35	11	32
12	34	12	32
13	34	13	31
14	34	14	30
15	33	15	30
16	33	16	29
17	32	17	29
18	31	18	28
19	31	19	28
20	30	20	25
21	30	21	25
22	29	22	22
23	29	23	21
24	29	24	20
25	28	25	19
26	27	26	18
27	27	27	4
28	26	28	0
29	25		
30	21		
31	20		
32	19		
33	18		
34	17		
Median	31.5		30.00
Mean	32		30.64
S.D.	8.50		12.53
S.E.M.	1.46		2.37

were at the two percentile, a media score of 31.5 or 32, a mean of 32, a standard deviation of 8.50 and a standard error of the mean of 1.46. The non-transported seventh grade pupils on the California Social and Related Science Test, Part II Test I, Geography, were at the two percentile, a median of 30.00, a mean of 30.64, a standard deviation of 12.53, and a standard error of the mean of 2.37. There was no significant difference between the transported and the non-transported, a standard deviation of two means of 2.78, a difference of the mean of 1.36 and a "t" score of .49.

TABLE 16

COMPARISON OF DATA OBTAINED BY THE SEVENTH GRADE TRANSPORTED AND NON-TRANSPORTED PUPILS IN SOCIAL STUDIES, PART II TEST I, LYLES ELEMENTARY SCHOOL AND CEDAR HILL ELEMENTARY SCHOOL, CEDARTOWN, GEORGIA

Group	Social Studies	Mean	Sigma	S.E.M.	Sigma $m_1 m_2$	Diff. of Mean	"t"
Transported	Social Studies	32	8.50	1.46			
					2.78	1.36	.49
Non-transported		30.64	12.53	2.37			

Comparative Data and "t" Ratio as Indicated in Table 18.--

It was found that on the California Social and Science Related Test, Part II Test II, Basic Social Processes, the seventh grade pupils were at the one percentile, a median of 23, a mean of 24, a standard deviation of 6.38, and a standard error of the mean of 1.09. The non-transported pupils on the California Social and

TABLE 17

CALIFORNIA RELATED SOCIAL AND SCIENCE TEST, SEVENTH GRADE
 PART II TEST II OF LYLES ELEMENTARY SCHOOL AND
 CEDAR HILL ELEMENTARY SCHOOL, CEDARTOWN,
 GEORGIA

Transported		Non-transported	
Number		Number	
1	37	1	51
2	34	2	45
3	33	3	41
4	33	4	35
5	32	5	34
6	32	6	34
7	32	7	32
8	32	8	30
9	31	9	28
10	28	10	27
11	27	11	26
12	26	12	25
13	26	13	24
14	26	14	24
15	26	15	23
16	25	16	22
17	23	17	21
18	23	18	20
19	22	19	20
20	22	20	19
21	22	21	19
22	22	22	19
23	21	23	19
24	21	24	18
25	20	25	16
26	19	26	12
27	19	27	0
28	17	28	0
29	16		
30	16		
31	16		
32	16		
33	15		
34	15		
Median	23	23.50	
Mean	24	24.43	
S.D.	6.38	10.64	
S.E.M.	1.09	2.01	

Science Related Test were at the one percentile, a median of 23.50, a mean of 24.43, a standard deviation of 10.64 and a standard error of the mean of 2.01. There was no significant difference between the transported and non-transported pupils, a standard deviation of two means of 2.29, a difference of the mean of .43 and a "t" score of .19.

TABLE 18

COMPARISON OF DATA OBTAINED BY SEVENTH GRADE TRANSPORTED AND NON-TRANSPORTED PUPILS IN SOCIAL STUDIES PART II TEST II, LYLES ELEMENTARY SCHOOL AND CEDAR HILL ELEMENTARY SCHOOL, CEDARTOWN, GEORGIA

Group	Social Studies	Mean	Sigma	S.E.M.	Sigma $m_1 m_2$	Diff. of Mean..	"t"
Transported		24	6.38	1.09			
	Social Studies				2.29	.43	.19
Non- transported		24.43	10.64	2.01			

Comparative Data and "t" Ratio as Indicated in Table 20.--

It was found that on the California Social and Related Science Part III Health and Safety Test I, the seventh grade pupils were at the five percentile, a median of 33, a mean of 35, a standard deviation of 8.60 and a standard error of the mean of 1.48. The non-transported pupils on the California Social Related Science Part III Health and Safety, Test I, were at the ten percentile, a median of 41.00, a mean of 41.32, a standard deviation of 11.73, and a standard error of the mean of 2.22. There was no significant

TABLE 19

CALIFORNIA RELATED SOCIAL AND SCIENCE TEST, SEVENTH GRADE PUPILS,
PART III, LYLES ELEMENTARY SCHOOL AND CEDAR HILL ELEMENTARY
SCHOOL, CEDARTOWN, GEORGIA

Transported		Non-Transported	
Number		Number	
1	52	1	61
2	51	2	59
3	47	3	56
4	46	4	55
5	45	5	54
6	43	6	53
7	42	7	52
8	41	8	51
9	41	9	50
10	40	10	49
11	39	11	48
12	39	12	46
13	39	13	42
14	38	14	41
15	36	15	41
16	33	16	39
17	33	17	39
18	33	18	39
19	33	19	37
20	33	20	35
21	32	21	32
22	32	22	32
23	32	23	30
24	31	24	28
25	31	25	23
26	30	26	22
27	28	27	22
28	28	28	21
29	27		
30	27		
31	24		
32	24		
33	22		
34	13		
Median	33		41.00
Mean	35		41.32
S.D.	8.60		11.73
S.E.M.	1.48		2.22

difference between the transported and non-transported, a standard deviation of two means of 2.67, a difference of the mean of 6.32, and a "t" score of 2.33.

TABLE 20

A COMPARISON OF DATA OBTAINED BY THE SEVENTH GRADE TRANSPORTED AND NON-TRANSPORTED PUPILS IN HEALTH AND SAFETY PART III TEST I, LYLES ELEMENTARY SCHOOL AND CEDAR HILL ELEMENTARY SCHOOL, CEDARTOWN, GEORGIA

Group	Health and Safety	Mean	Sigma	S.E.M.	Sigma $m_1 m_2$	Diff. of Mean	"t"
Transported		35	8.60	1.48			
	Health and Safety				2.67	6.32	2.33
Non- transported		41.32	11.73	2.22			

Comparative Data and "t" Ratio as Indicated in Table 22.--

The results from the California Social and Related Science Test Part III Test II, Elementary Science, show that the seventh grade pupils were at one percentile, a median of 29, a mean of 29, a standard deviation of 7.45, and a standard error of the mean of 1.28. The non-transported seventh grade pupils showed that on the California Social and Related Science Test, Part III Test II Elementary Science, were of two percentile, a median of 28.00, a mean of 30.10, a standard deviation of 9.55, and a standard error of the mean of 1.81. There was no significant difference between the transported and non-transported, a standard deviation of two means of 2.22, a difference of the mean of .90 and a "t"

TABLE 21

CALIFORNIA TEST IN SOCIAL AND RELATED SCIENCE, PART III ELE-
 MENTARY SCIENCE, SEVENTH GRADE PUPILS, LYLES ELEMENTARY
 AND CEDAR HILL ELEMENTARY SCHOOL, CEDARTOWN,
 GEORGIA

Transported		Non-transported	
Number		Number	
1	45	1	56
2	40	2	53
3	39	3	43
4	39	4	41
5	38	5	41
6	37	6	38
7	36	7	34
8	35	8	34
9	35	9	34
10	33	10	33
11	33	11	31
12	32	12	29
13	31	13	29
14	31	14	28
15	30	15	28
16	29	16	27
17	29	17	24
18	29	18	24
19	28	19	24
20	28	20	24
21	27	21	23
22	25	22	23
23	24	23	23
24	24	24	23
25	23	25	22
26	23	26	22
27	21	27	22
28	21	28	20
29	20		
30	20		
31	19		
32	18		
33	17		
34	15		
Median	29		28.00
Mean	29		30.10
S.D.	7.45		9.55
S.E.M.	1.28		1.81

score of .41.

TABLE 22

A COMPARISON OF DATA OBTAINED BY THE SEVENTH GRADE TRANSPORTED
PUPILS IN SCIENCE PART III TEST II, LYLES ELEMENTARY
SCHOOL AND CEDAR HILL ELEMENTARY SCHOOL, CEDAR#
TOWN, GEORGIA

Group	Elemen- tary Science	Mean	Sigma	S.E.M.	Sigma m m 1 2	Diff. of Mean	"t"
Transported	Elemen- tary Science	29	7.45	1.28	2.22	.90	.41
Non- transported		30.10	9.55	1.81			

Transported.--The median of 66.50, a mean of 60.18, a standard deviation of 15.47, and a standard error of the mean were made by the transported pupils on Part I of California Personality Test, Personal Adjustment and that a median of 63.50, a mean of 62.74, standard deviation of 13.65 and a standard error of the mean of 2.34 were made by the transported pupils on Part II of California Personality Test, Social Adjustment. A median of 123.00, a mean of 121.09 and a standard deviation of 27.22 and a standard error of the mean of 4.67, the scores made on the total test of California Personality Test by the transported pupils.

Non-Transported.--The median of 51, a mean of 50, a standard deviation of 13.00, and a standard error of the mean of 2.46 were made by the non-transported pupils on Part I of California Personality Test, Personal Adjustment; and a median of 54, a mean of

TABLE 23

CALIFORNIA PERSONAL TEST PART I, PERSONAL ADJUSTMENT, SEVENTH
 GRADE PUPILS, LYLES ELEMENTARY SCHOOL AND CEDAR HILL
 ELEMENTARY SCHOOL, CEDARTOWN, GEORGIA

Transported		Non-transported	
Number		Number	
1	86	1	79
2	85	2	76
3	85	3	75
4	80	4	71
5	79	5	65
6	71	6	65
7	71	7	63
8	71	8	61
9	70	9	61
10	69	10	59
11	68	11	57
12	67	12	56
13	67	13	53
14	67	14	49
15	64	15	46
16	64	16	46
17	63	17	45
18	58	18	45
19	58	19	43
20	55	20	42
21	54	21	42
22	53	22	41
23	52	23	40
24	51	24	39
25	50	25	37
26	47	26	36
27	46	27	30
28	46	28	0
29	46		
30	45		
31	43		
32	42		
33	39		
34	34		
Median	66.50		51
Mean	60.18		50
S.D.	15.47		13.00
S.E.M.	2.65		2.46

55, a standard deviation of 14.48, and a standard error of the mean of 2.74 were made by the non-transported pupils on Part II of California Personality Test, Social Adjustment. A median of 104, a mean of 109, a standard deviation of 26.16, and a standard error of the mean of 4.95 was the score made on the total test of California Personality Test by the non-transported pupils.

Comparative Data and "t" Ratio as Indicated in Table 24.--

The results from the California Personality Test Part I, Personal Adjustment by seventh grade transported pupils show a percentile of eighty, a median of 66.50, a mean of 60.18, a standard deviation of 15.47 and a standard error of the mean of 2.65. It also showed that the non-transported pupils on the California Personality Test, Part I, Personality Adjustment, were at fifty percentile, a median of 51, a mean of 50, a standard deviation of 13.00, a standard error of the mean of 2.46. There is a slight difference between transported and non-transported, a standard deviation of two means of 3.62, a difference of the mean of 10.18, and a "t" score of 2.81.

TABLE 24

COMPARISON OF DATA OBTAINED BY THE SEVENTH GRADE PUPILS
TRANSPORTED AND NON-TRANSPORTED, CALIFORNIA PERSON-
ALITY TEST PART I PERSONAL ADJUSTMENT, LYLES
ELEMENTARY SCHOOL AND CEDAR HILL ELE-
MENTARY SCHOOL, CEDARTOWN, GEORGIA

Group	Person- ality Personal Adjust.	Mean	Sigma	S.E.M.	Sigma		Diff. of Mean	"t"
					m	m		
					1	2		
Transported	Person- ality	60.18	15.47	2.65				
					3.62	10.18	2.81	
Non- transported	Personal Adjust.	50	13.00	2.46				

Comparative Data and "t" Ratio as Indicated in Table 26.--

It was found that on the California Personality Test Part II Social Adjustment, the seventh grade transported pupils were at the eighty percentile, a median of 63.50, a mean of 62.74, a standard deviation of 13.65, and a standard error of the mean of 2.34. The non-transported seventh grade pupils on the California Personality Test Part II, Social Adjustment, were at the seventy percentile, a median score of 54, a mean of 55, a standard deviation of 14.48, and a standard error of the mean of 2.74. There was no significant difference between the transported and non-transported, a standard deviation of two means of 3.60, a difference of the mean of 7.74, and a "t" score of 2.15.

Comparative Data and "t" Ratio as Indicated in Table 28.--

It was found that on the results of the California Personality Test by the seventh grade transported pupils show a percentile of forty, a median of 123, a mean of 121.09, a standard deviation

TABLE 25

RESULTS OF CALIFORNIA PERSONALITY TEST, SOCIAL ADJUST-
MENT, SEVENTH GRADE PUPILS, LYLES ELEMENTARY
SCHOOL, AND CEDAR HILL ELEMENTARY
SCHOOL, CEDARTOWN, GEORGIA

Transported		Non-transported	
Number		Number	
1	84	1	85
2	83	2	78
3	82	3	75
4	81	4	75
5	77	5	74
6	76	6	71
7	72	7	70
8	68	8	70
9	68	9	68
10	66	10	68
11	65	11	64
12	65	12	63
13	64	13	61
14	63	14	60
15	60	15	48
16	59	16	46
17	59	17	46
18	59	18	46
19	59	19	46
20	58	20	45
21	58	21	45
22	57	22	44
23	56	23	43
24	56	24	41
25	55	25	41
26	54	26	36
27	52	27	36
28	51	28	36
29	49		
30	42		
31	39		
32	38		
33	38		
34	38		
Median	63.50		54
Mean	62.74		55
S.D.	13.65		14.48
S.E.M.	2.34		2.74

TABLE 26

COMPARISON OF DATA OBTAINED BY THE SEVENTH GRADE PUPILS
TRANSPORTED AND NON-TRANSPORTED, CALIFORNIA PERSON-
ALITY TEST PART II SOCIAL ADJUSTMENT LYLES ELE-
MENTARY SCHOOL AND CEDAR HILL ELEMENTARY
SCHOOL, CEDARTOWN, GEORGIA

Group	Person- ality Social Adjust.	Mean	Sigma	S.E.M.	Sigma		Diff. of Mean	"t"
					m	m		
					1	2		
Transported	Person-	62.74	13.65	2.34				
	ality				3.60		7.74	2.15
Non-	Social	55	14.48	2.74				
Transported	Adjust.							

of 27.22, and a standard error of the mean of 4.67. The non-transported seventh grade pupil show a percentile of twenty, a median of 104, a mean of 109, a standard deviation of 26.16, and a standard error of the mean of 4.95. There is no significant difference between the transported and non-transported, a standard deviation of the mean of 6.81, a difference of the mean of 12.09, and a "t" score of 1.78.

Transported.--It was found that the seventh grade transported pupils obtained an average grade of "C" in reading which is 78.00, a median of 78.00, a mean of 78.00, a standard deviation of 5.30, and a standard error of the mean of .91.

Non-Transported.--The non-transported seventh grade pupils obtained an average grade of "C" in reading which is 76.04, a median of 78.00, a mean of 76.00, a standard deviation of 10.65

TABLE 27

CALIFORNIA PERSONALITY TEST, TOTAL TEST SCORES, SEVENTH GRADE
 LYLES ELEMENTARY SCHOOL AND CEDAR HILL ELEMENTARY
 SCHOOL, CEDARTOWN, GEORGIA

Transported		Non-transported	
Number		Number	
1	170	1	150
2	168	2	150
3	167	3	149
4	162	4	146
5	160	5	139
6	148	6	138
7	147	7	134
8	147	8	133
9	138	9	129
10	137	10	125
11	134	11	120
12	132	12	116
13	132	13	110
14	131	14	104
15	127	15	104
16	124	16	98
17	122	17	95
18	117	18	94
19	117	19	89
20	114	20	88
21	112	21	85
22	110	22	84
23	108	23	83
24	107	24	82
25	105	25	81
26	101	26	78
27	100	27	73
28	95	28	73
29	94		
30	87		
31	82		
32	80		
33	77		
34	72		
Median	123.00		104
Mean	121.09		109
S.D.	27.22		26.16
S.E.M.	4.67		4.95

TABLE 28

COMPARISON OF DATA OBTAINED BY TRANSPORTED AND NON-TRANSPORTED
PUPILS, TOTAL PERSONALITY TEST SCORES OF LYLES ELEMENTARY
SCHOOL AND CEDAR HILL ELEMENTARY SCHOOL, CEDARTOWN,
GEORGIA

Group	Person- ality	Mean	Sigma	S.E.M.	Sigma $m_1 m_2$	Diff. of Mean	"t"
Transported	Person- ality	121.09	27.22	4.67	6.81	12.09	1.78
Non- transported		104	26.16	4.95			

and a standard error of the mean of 2.01.

Comparative Data and "t" Ratio as Indicated in Table 30.--It was found that seventh grade transported pupils obtained an average grade of "C" in reading which is 78.00, a median of 78.00, a mean of 78.00, a standard deviation of 5.30, and a standard error of the mean of .91. The non-transported seventh grade pupils obtained an average grade of "C" in reading which is 76.04, a median of 78.00, a mean of 76.00, a standard deviation of 10.65 and a standard error of the mean of 2.01. There was no significant difference between transported and non-transported, a standard deviation between two means of 2.21, a difference of the means of 1.96, and a "t" score of .89.

Transported.--It was found that the seventh grade transported pupils in arithmetic show a median of 78.00, a mean of 77.55, a standard deviation of 4.90, and a standard error of the mean of .84.

Non-transported.--The seventh grade non-transported pupils in

TABLE 29

SCHOOL MARKS, SEVENTH GRADE PUPILS, LYLES ELEMENTARY SCHOOL
AND CEDAR HILL ELEMENTARY SCHOOL, CEDARTOWN, GEORGIA

Reading School Marks Averages	Transported		Non-transported	
	Number	Per Cent	Number	Per Cent
96 - 100	0	0	1	3.57
91 - 95	0	0	2	7.14
86 - 90	5	14.71	2	7.14
81 - 85	2	5.88	2	7.14
76 - 80	17	50.00	9	32.16
71 - 75	8	23.53	8	28.57
66 - 70	2	5.88	0	0
61 - 65	0	0	1	3.57
56 - 60	0	0	1	3.57
51 - 55	0	0	2	7.14
46 - 50	0	0	0	0
41 - 45	0	0	0	0
Total	34	100.00	28	100 .00
Median	78.00		78.00	
Mean	78.00		76.04	
Standard Deviation	5.30		10.65	
S.E.M.	.91		2.01	

TABLE 30

Group	Reading	Mean	Sigma	S.E.M.	Sigma $m_1 m_2$	Diff. of Mean	"t"
Transported		78.00	5.30	7.91			
	Reading				2.21	1.96	.89
Non-transported		76.04	10.65	2.01			

arithmetic show a median of 78.00, a mean of 79.61, a standard deviation of 7.70 and a standard error of the mean of 1.46.

Comparative Data and "t" Ratio as Indicated in Table 32.--The school mark obtained by the seventh grade transported pupils in arithmetic was "C" which is average, a median of 78.00, a mean of 77.55, a standard deviation of 4.90 and a standard error of the mean of .84. The seventh grade non-transported pupils obtained the grade of "C" in arithmetic which is average, a median of 78.00, a mean of 79.61, a standard deviation of 7.70, and a standard error of the mean of 1.46. There was no real significant difference between transported and non-transported, a standard deviation of the two means of 1.68, a difference of the mean of 2.06, and a "t" score of 1.22.

Transported.--The "school mark" in spelling obtained by the seventh grade transported pupils was 78.00, an average grade of "C", a median of 78.00, a mean of 78.75, a standard deviation of 5.70, and a standard error of the mean of .98. The "school mark" in spelling obtained by the seventh grade non-transported pupils

TABLE 31

SCHOOL MARKS, ARITHMETIC, SEVENTH GRADE PUPILS
 LYLES ELEMENTARY SCHOOL AND CEDAR HILL
 ELEMENTARY SCHOOL, CEDARTOWN, GEORGIA

Arithmetic Averages	Transported		Non-transported	
	Number	Per cent	Number	Per cent
96 - 100	0	0	1	3.57
91 - 95	0	0	1	3.57
86 - 90	3	8.82	4	14.29
81 - 85	2	5.88	4	14.29
76 - 80	21	61.77	8	28.57
71 - 75	6	17.65	7	25.00
66 - 70	1	2.94	2	7.14
61 - 65	1	2.94	1	3.57
56 - 60	0	0.00	0	0
51 - 55	0	0	0	0
46 - 50	0	0	0	0
41 - 45	0	0	0	0
Total	34	100.00	28	100.00
Median	78.00		78.00	
Mean	77.55		79.61	
Standard Deviation	4.90		7.70	
S.E.M.	.84		1.46	

TABLE 32

COMPARISON OF "SCHOOL MARKS" OBTAINED BY TRANSPORTED AND
NON-TRANSPORTED PUPILS IN ARITHMETIC, SEVENTH GRADE
LYLES ELEMENTARY SCHOOL AND CEDAR HILL ELEMEN-
TARY SCHOOL, CEDARTOWN, GEORGIA

Group	Arithmetic	Mean	Sigma	S.E.M.	Sigma $m_1 m_2$	Diff.of Mean	"t"
Transported	Arithmetic	77.55	4.90	.84			
					1.68	2.06	1.22
Non- transported		79.61	7.70	1.46			

was 82.29, an average grade of "B", a median of 73.00, a mean of 82.29, a standard deviation of 7.80, and a standard error of the mean of 1.10.

Comparative Data and "t" Ratio as Indicated in Table 34.--The "school mark" in spelling obtained by the seventh grade transported pupils was 78.00, an average grade of "C", a median of 78.00, a mean of 78.75, a standard deviation of 5.70, and a standard error of the mean of .98. The "school mark", in spelling obtained by the seventh grade non-transported pupils was 82.29, a standard deviation of 7.80, and a standard error of the mean of 1.10. There was no significant difference between the transported and non-transported, a standard deviation of two means of 1.47, a difference of the mean of 3.54, and a "t" score of 2.41.

Transported.--The "school mark" obtained in social studies by the seventh grade transported pupils was a grade of "C" an

TABLE 33

SCHOOL MARKS, SPELLING, SEVENTH GRADE PUPILS OF CEDAR HILL HIGH
SCHOOL, CEDAR HILL, GEORGIA

Averages	Transported		Non-transported	
	Number	Per cent	Number	Per cent
96 - 100	0	0	2	7.14
91 - 95	0	0	3	10.71
86 - 90	7	20.59	4	14.28
81 - 85	4	11.76	6	21.43
76 - 80	14	41.18	5	18.57
71 - 75	6	17.65	7	25.00
66 - 70	2	5.88	1	3.57
61 - 65	1	2.94	0	0
56 - 60	0	0	0	0
51 - 55	0	0	0	0
46 - 50	0	0	0	0
41 - 45	0	0	0	0
Median	78.00	73.00		
Mean	78.75	82.29		
S.D.	5.70	7.80		
S.E.M.	.98	1.10		

TABLE 34

COMPARISON OF "SCHOOL MARKS" OBTAINED BY THE TRANSPORTED AND
NON-TRANSPORTED PUPILS IN SPELLING, SEVENTH GRADE OF
LYLES ELEMENTARY SCHOOL AND CEDAR HILL ELEMEN-
TARY SCHOOL, CEDARTOWN, GEORGIA

Group	Spelling	Mean	Sigma	S.E.M.	Sigma $m_1 m_2$	Diff. of Mean	"t"
Transported		78.75	5.70	.98			
	Spelling				1.47	3.54	2.41
Non- transported		82.29	7.80	1.10			

average of 78.45, a median of 78.00, a mean of 78.45, a standard deviation of 7.20, and a standard error of the mean of 1.24.

Non-transported.--The "school mark" obtained in social studies by the seventh grade non-transported pupils was a grade of "C", an average of 74.50, a median of 78.00, a mean of 74.50, a standard deviation of 8.30, and a standard error of the mean of 1.57.

Comparative Data and "t" Ratio as Indicated in Table 36.--

The "school mark" obtained in social studies by the seventh grade pupils was a grade of "C" an average of 78.45, a median of 78.00, a mean of 78.45, a standard deviation of 7.20, and a standard error of the mean of 1.24. The "school mark" obtained in social studies by the seventh grade non-transported pupils was a grade of "C" an average of 74.50, a median of 78.00, a mean of 74.50, a standard deviation of 8.30, and a standard error of the mean of 1.57.

TABLE 35

SCHOOL MARKS, SOCIAL STUDIES, SEVENTH GRADE PUPILS, CEDAR HILL HIGH
SCHOOL, CEDAR HILL, GEORGIA

Averages	Number	Transported	Non-transported	
		Per cent	Number	Per cent
96 - 100	1	2.94	1	3.57
91 - 95	0	0	1	3.57
86 - 90	4	11.76	2	7.14
81 - 85	5	14.71	0	0
76 - 80	16	47.06	9	32.16
71 - 75	5	14.71	8	28.57
66 - 70	1	2.94	4	14.28
61 - 65	1	2.94	3	10.71
56 - 60	1	2.94	0	0
51 - 55	0	0	0	0
46 - 50	0	0	0	0
41 - 45	0	0	0	0
Total	34	100.00	28	100.00
Median	78.00		78.00	
Mean	78.45		74.50	
S.D.	7.20		8.30	
S.E.M.	1.24		1.57	

TABLE 36

COMPARISON OF "SCHOOL MARK" OBTAINED BY THE TRANSPORTED AND NON-TRANSPORTED PUPILS IN SOCIAL STUDIES, SEVENTH GRADE OF LYLES ELEMENTARY SCHOOL AND CEDAR HILL ELEMENTARY SCHOOL
CEDARTOWN, GEORGIA

Group	Social Studies	Mean	Sigma	S.E.M.	Sigma $m_1 m_2$	Diff. of Mean	"t"
Transported	Social Studies	78.45	7.20	1.24			
					2.00	3.95	1.98
Non- transported		74.50	8.30	1.57			

There was no significant difference between the transported and non-transported pupils in social studies, a standard deviation of two means of 2.00, a difference of the means of 3.95, and a "t" score of 1.98.

Transported.---The "school mark" obtained in science by the seventh grade transported pupils was a grade of "C" an average of 78.45, a median of 78.00, a mean of 78.45, a standard deviation of 5.30, and a standard error of the mean of .91.

Non-transported.---The "school mark" in science by the seventh grade non-transported pupils was a grade of "C" an average of 76.57, a median of 73.00, a mean of 76.57, a standard deviation of 5.50, and a standard error of the mean of 1.04.

Comparative Data and "t" Ratio as Indicated in Table 38.---

The "school mark" obtained in science by the seventh grade transported pupils was a grade of "C" an average of 78.45, a median of

TABLE 37

SCHOOL MARKS, SCIENCE, SEVENTH GRADE PUPILS, CEDAR HILL HIGH
SCHOOL, CEDAR HILL, GEORGIA

Averages	Transported		Non-transported	
	Number	Per cent	Number	Per cent
96 -100	0	0	0	0
91 - 95	0	0	1	3.57
86 - 90	5	14.71	3	10.71
81 - 85	3	8.82	0	0
76 - 80	19	55.88	10	35.72
71 - 75	5	14.71	12	42.86
66 - 70	1	2.94	1	3.57
61 - 65	1	2.94	1	3.57
56 - 60	0	0	0	0
51 - 55	0	0	0	0
46 - 50	0	0	0	0
41 - 45	0	0	0	0
Total	34	100.00	28	100.00
Median	78.00		73.00	
Mean	78.45		76.57	
S.D.	5.30		5.50	
S.E.M.	.91		1.04	

TABLE 38

COMPARISON OF "SCHOOL MARK" OBTAINED BY TRANSPORTED AND NON-TRANSPORTED PUPILS IN SCIENCE, SEVENTH GRADE, LYLES ELEMENTARY SCHOOL, AND CEDAR HILL ELEMENTARY SCHOOL, CEDARTOWN, GEORGIA

Group	Science	Mean	Sigma	S.E.M.	Sigma $m_1 m_2$	Diff. of Mean	"t"
Transported		78.45	5.30	.91			
	Science				1.38	1.88	1.36
Non-Transported		76.57	5.50	1.404			

78.00, a mean of 78.45, a standard deviation of 5.30 and a standard error of the mean of .91. The "school mark" in science by the seventh grade non-transported pupils was a grade of "C", an average of 76.57, a median of 73.00, a mean of 76.57, a standard deviation of 5.50, and a standard error of the mean of 1.04. There was no significant difference between the transported and the non-transported, a standard deviation of the two means of 1.38, a difference of the means of 1.88, and a "t" score of 1.36.

Transported.--The "school mark" obtained in English by the seventh grade transported pupils was a grade of "C", an average of 76.95, a median of 78.00, a mean of 76.95, a standard deviation of 5.90, and a standard error of the mean of 1.01.

Non-Transported.--The "school mark" obtained in English by the seventh grade non-transported pupils was a grade of "C", an average of 77.46, a median of 73.00, a mean of 77.46, a

TABLE 39

SCHOOL MARKS, ENGLISH, SEVENTH GRADE PUPILS, CEDAR HILL HIGH SCHOOL
CEDAR HILL, GEORGIA

Averages	Transported		Non-transported	
	Number	Per cent	Number	Per cent
96 -100	0	0	1	3.57
91 - 95	0	0	0	0
86 - 90	3	8.82	2	7.14
81 - 85	3	8.82	3	10.71
76 - 80	19	55.88	10	35.72
71 - 75	4	11.76	10	35.72
66 - 70	3	8.82	2	7.14
61 - 65	2	5.88	0	0
56 - 60	0	0	0	0
51 - 55	0	0	0	0
46 - 50	0	0	0	0
41 - 45	0	0	0	0
Total	34	100.00	28	100.00
Median	78.00		73.00	
Mean	76.95		77.46	
S.D.	5.90		6.10	
S.E.M.	1.01		1.15	

TABLE 40

COMPARISON "SCHOOL MARKS" OBTAINED BY THE TRANSPORTED AND NON-TRANSPORTED PUPILS IN ENGLISH, SEVENTH GRADE OF LYLES ELEMENTARY SCHOOL AND CEDAR HILL ELEMENTARY SCHOOL, CEDARTOWN, GEORGIA

Group	English	Mean	Sigma	S.E.M.	Sigma $m_1 m_2$	Diff. of Mean	"t"
Transported		76.95	5.90	1.01			
	English				1.53	.51	.33
Non-transported		77.46	6.10	1.15			

standard deviation of 6.10, and a standard error of the mean of 1.15.

Comparative Data and "t" Ratio as Indicated by Table 40.--

The "school mark" obtained in English by the seventh grade transported pupils was a grade of "C", an average of 76.95, a median of 78.00, a mean of 76.95, a standard deviation of 5.90, and a standard error of the mean of 1.01. The "school mark" obtained in English by the seventh grade non-transported pupils was a grade of "C", an average of 77.46, a median of 73.00, a mean of 77.46, a standard deviation of 6.10, and a standard error of the mean of 1.15. There was no significant difference between the transported and non-transported, a standard deviation of the means of 1.53, a difference of the mean of .51, and a "t" score of .33.

TABLE 41

CALIFORNIA ACHIEVEMENT TEST RESULTS IN READING, NINTH GRADE
CEDAR HIGH SCHOOL, CEDARTOWN, GEORGIA

Transported		Non-transported	
Number		Number	
1	9.2	1	9.2
2	8.7	2	8.9
3	8.6	3	8.4
4	7.9	4	7.9
5	7.3	5	7.8
6	6.8	6	7.6
7	6.7	7	7.3
8	6.4	8	7.2
9	6.3	9	6.9
10	6.0	10	6.9
11	6.0	11	6.9
12	5.8	12	6.7
13	5.7	13	6.7
14	5.6	14	6.6
15	5.5	15	6.3
16	5.4	16	6.0
17	5.2	17	5.7
18	5.2		
19	4.3		
Median	6.0		6.9
Mean	6.5		7.2
S.D.	1.38		1.00
S.E.M.	.32		.24

STATISTICAL ANALYSIS OF THE NINTH GRADE

California Achievement Test Result in Reading

Transported.--The following measures were obtained by the transported pupils of the ninth grade in reading, a median of 6.0, a mean of 6.5, a standard deviation of 1.38, and a standard error of the mean of .32.

Non-transported.--The non-transported pupils of the ninth grade in reading measures were obtained, a median of 6.9, a mean of 7.2, a standard deviation of 1.00, and a standard error of the mean of .24.

California Achievement Test Result in Arithmetic

Transported.--The following measures were obtained for transported pupils of the ninth grade in arithmetic, a median of 6.0, a mean of 6.4, a standard deviation of 1.45, and a standard error of the mean of .33.

Non-transported.--The non-transported pupils of the ninth grade, a median of 6.3, a mean of 6.2, a standard deviation of .88 and a standard error of the mean of .21.

Comparative Data and "t" Ratio as Indicated in Table 42.--

The ninth grade transported pupils grade placement in reading was 6.5, which is a three year and two months below the national norm; a median of 6.0, a mean of 6.5, a standard deviation of 1.38, and a standard error of the mean of .32. The ninth grade non-transported pupils grade placement in reading was 7.2 which is a two years and five months below the national norm, a median of

TABLE 42

COMPARISON OF DATA OBTAINED BY TRANSPORTED AND NON-TRANSPORTED
PUPILS IN READING, NINTH GRADE OF CEDAR HILL HIGH SCHOOL,
CEDARTOWN, GEORGIA

Group	Achieve- ment in Reading	Mean	Sigma	S.E.M.	Sigma		Diff. of Mean	"t"
					m_1	m_2		
Transported	Achieve- ment in Reading	6.5	1.38	.32				
Non- transported		6.9	1.00	.24	.40	.7	1.75	

6.9, a mean of 7.2, a standard deviation of 1.00, and a standard error of the mean of .24. There was no significant difference between the transported and non-transported pupils, a standard deviation of two means of .40, a difference of mean of .7, and a "t" score of 1.75.

Comparative Data and "t" Ratio as Indicated in Table 44.--

The measures obtained by the transported pupils of the ninth grade in arithmetic were a median of 6.0, a mean of 6.4, a standard deviation of 1.45, and a standard error of the mean of .33.

The non-transported pupils of the ninth grade, a median of 6.3, a mean of 6.2, a standard deviation of .88, and a standard error of the mean of .21. The transported pupils of the ninth grade in arithmetic was three years and three months below the national norm. The non-transported pupils of the ninth grade in arithmetic was three years and five months below the national norm. There

TABLE 43

CALIFORNIA ACHIEVEMENT TEST RESULTS, ARITHMETIC, NINTH GRADE
CEDAR HILL HIGH SCHOOL, CEDARTOWN, GEORGIA

Transported		Non-transported	
Number		Number	
1	10.4	1	7.7
2	8.6	2	7.5
3	7.6	3	7.0
4	7.5	4	6.8
5	6.9	5	6.8
6	6.9	6	6.6
7	6.5	7	6.6
8	6.4	8	6.4
9	6.1	9	6.3
10	6.0	10	6.0
11	6.0	11	5.9
12	5.8	12	5.6
13	5.5	13	5.6
14	5.5	14	5.5
15	5.4	15	5.1
16	4.9	16	4.8
17	4.9	17	4.6
18	4.9		
19	4.5		
Median	6.0		6.3
Mean	6.4		6.2
S.D.	1.45		.88
S.E.M.	.33		.21

was no significant difference between the transported and non-transported pupils, a standard deviation of the two means of .39, a difference of the mean of .2, and a "t" score of .51.

TABLE 44

COMPARISON OF DATA OBTAINED BY THE TRANSPORTED AND NON-TRANSPORTED PUPILS IN ARITHMETIC, NINTH GRADE OF CEDAR HILL HIGH SCHOOL, CEDARTOWN, GEORGIA

Group	Achievement in Arithmetic	Mean	Sigma	S.E.M.	Sigma		Diff. of Mean	"t"
					m ₁	m ₂		
Transported	Achievement in Arithmetic	6.4	1.45	.33				
Non-transported	Achievement in Arithmetic	6.2	.88	.21	.39	.2	.51	

California Achievement Test Results in Language

Transported.--The following measures were obtained by the ninth grade transported pupils in language, a median of 5.7, a mean of 5.7, a standard deviation of 1.82, and a standard error of the mean of .42.

Non-transported.--The following measures were obtained by non-transported pupils in language, a median of 7.3, a mean of 7.3, a standard deviation of .94, and a standard error of the mean of .23.

California Achievement Total Test Results

Transported.--The following measures were obtained by the transported ninth grade pupils in total achievement test results,

a median of 5.6, a mean of 6.1, a standard deviation of 1.52, and a standard error of the mean of .33.

Non-transported.--For the non-transported pupils the following measures were obtained, ninth grade, total test results, a median of 6.7, a mean of 6.9, a standard deviation of .84, and a standard error of the mean of .20.

Intelligence Scores

Transported.--The following measures were obtained by the transported ninth grade intelligence scores, a median of .84, a mean of .82, a standard deviation of 4.99, and a standard error of the mean of 1.14.

Non-transported.--For the non-transported ninth grade, the following measures were obtained, a median of 84, a mean of 87, a standard deviation of 4.29, and a standard error of the mean of 1.04.

Comparative Data and "t" Ratio as Indicated in Table 46.--The following measures were obtained by the ninth grade transported pupils in language, a median of 5.7, a mean of 5.7, a standard deviation of 1.82, and a standard error of the mean of .42. The non-transported ninth grade pupils in language obtained, a median of 7.3, a mean of 7.3, a standard deviation of .94, and a standard error of the mean of .23. The transported ninth grade was four years below the national norm and the non-transported ninth grade was two years and five months below the national norm. There was a significant difference between the transported and

TABLE 45

CALIFORNIA ACHIEVEMENT TEST RESULTS, LANGUAGE, NINTH GRADE PUPILS
CEDAR HILL HIGH SCHOOL, CEDARTOWN, GEORGIA

Transported		Non-transported	
Number		Number	
1	10.6	1	9.5
2	9.2	2	8.4
3	9.1	3	7.9
4	8.8	4	7.8
5	7.2	5	7.7
6	6.1	6	7.6
7	6.1	7	7.6
8	6.0	8	7.4
9	5.8	9	7.3
10	5.7	10	6.9
11	5.5	11	6.9
12	5.4	12	6.4
13	4.9	13	6.3
14	4.7	14	6.2
15	4.7	15	6.1
16	4.6	16	6.1
17	4.5	17	6.0
18	4.3		
19	4.2		
Median	5.7		7.3
Mean	5.7		7.3
S.D.	1.82		.94
S.E.M.	.42		.23

non-transported in favor of non-transported, a standard deviation of two means of .48, a difference of means of 1.6, and a "t" score of 3.33.

TABLE 46

COMPARISON OF DATA OBTAINED BY THE TRANSPORTED AND NON-TRANSPORTED PUPILS IN LANGUAGE, NINTH GRADE, CEDAR HILL HIGH SCHOOL, CEDAR HILL, GEORGIA

Group	Achievement Language	Mean	Sigma	S.E.M.	Sigma m_1 m_1	Diff.of Mean "t"
Transported		5.7	1.82	.42		
Non-transported	Achievement Language	7.3	.94	.23	.48	1.6 3.33

Comparative Data and "t" Ratio as Indicated in Table 48.--The measures obtained by the transported ninth grade in total achievement test were, a median of 5.6, a mean of 6.1, a standard deviation of 1.52, and a standard error of the mean of .33. The measures for the non-transported ninth grade in total achievement test were, a median of 6.7, a mean of 6.9, a standard deviation of .84, and a standard error of the mean of .20. There was no significant difference between the transported and non-transported, a standard deviation of two means of .39, a difference of mean of .8, and a "t" score of 2.05. The transported ninth grade pupils were three years and six months below the national norm and the non-transported ninth grade pupils were three years below the national norm.

TABLE 47

CALIFORNIA ACHIEVEMENT TEST TOTAL RESULTS GRADE PLACEMENT, NINTH
GRADE PUPILS, CEDAR HILL HIGH SCHOOL, CEDARTOWN GEORGIA

Transported		Non-transported	
Number		Number	
1	10.0	1	8.8
2	8.6	2	7.9
3	8.0	3	7.9
4	7.4	4	7.3
5	6.7	5	7.3
6	6.6	6	7.2
7	6.4	7	7.2
8	5.9	8	6.8
9	5.6	9	6.7
10	5.6	10	6.6
11	5.5	11	6.5
12	5.4	12	6.4
13	5.3	13	6.3
14	5.3	14	6.1
15	5.0	15	6.0
16	4.9	16	6.0
17	4.9	17	5.6
18	4.8		
19	4.7		
Median	5.6		6.7
Mean	6.1		6.9
S.D.	1.52		.84
S.E.M.	.33		.20

TABLE 48

A COMPARISON OF DATA OBTAINED BY THE TRANSPORTED AND NON-TRANSPORTED PUPILS, TOTAL TEST, NINTH GRADE, CEDAR HILL HIGH SCHOOL, CEDARTOWN, GEORGIA

Group	Total Achieve- ment	Mean	Sigma	S.E.M.	Sigma $m_1 m_1$	Diff.of Mean	"t"
Transported		6.1	1.52	.33			
Non-Transported	Total Achieve- ment				.39	.8	2.05
		6.7	.84	.20			

TABLE 49

INTELLIGENCE QUOTIENTS, NINTH GRADE PUPILS, CEDAR HILL HIGH SCHOOL
CEDAR HILL, GEORGIA

Transported		Non-transported	
Number		Number	
1	101.5	1	95
2	95	2	92
3	92	3	92
4	88	4	88
5	84	5	88
6	84	6	88
7	84	7	88
8	84	8	84
9	84	9	84
10	84	10	84
11	84	11	84
12	84	12	84
13	84	13	84
14	84	14	84
15	84	15	84
16	84	16	84
17	84	17	84
18	84		
19	84		
Median	84	Median	84
Mean	86	Mean	87
S.D.	4.99	S.D.	4.29
S.E.M.	1.14	S.E.M.	1.04

Comparative Data and "t" Ratio as Indicated in Table 50.--The following measures were obtained by the ninth grade transported pupils in intelligence, a median of 84, a mean of 86, a standard deviation of 4.99, and a standard error of the mean of 1.14. For the non-transported ninth grade pupil, the following measures were obtained in intelligence, a median of 84, a mean of 87, a standard deviation of 4.29, and a standard error of the mean of 1.04. There was no significant difference between transported and non-transported pupils, a standard deviation of two means of 1.54, a difference of the means of 1.00, and a "t" score of .65. The transported and non-transported pupils are below normal in intelligence.

TABLE 50

COMPARISON OF INTELLIGENCE QUOTIENTS OF TRANSPORTED AND NON-TRANSPORTED PUPILS, NINTH GRADE, CEDAR HILL HIGH SCHOOL, CEDAR HILL, GEORGIA

Group	Intelli- gence	Mean	Sigma	S.E.M.	Sigma $m_1 m_2$	Diff. of Mean	"t"
Transported		86	4.99	1.14			
Non-transported	Intelli- gence	87	4.29	1.04	1.54	1.00	.65

Transported.--The following measures were obtained by the ninth grade transported pupils on the California Social and Related Science Part I Test I, a median of 19.00, a mean of 17.32,

TABLE 51

CALIFORNIA TESTS OF SOCIAL AND RELATED SCIENCES, PART I TEST I
 NINTH GRADE PUPILS, CEDAR HILL HIGH SCHOOL, CEDARTOWN,
 GEORGIA

Transported		Non-Transported	
Number		Number	
1	24	1	33
2	22	2	25
3	22	3	22
4	21	4	22
5	21	5	22
6	21	6	22
7	20	7	21
8	19	8	20
9	19	9	19
10	19	10	19
11	18	11	17
12	17	12	17
13	15	13	16
14	15	14	15
15	14	15	13
16	13	16	13
17	11	17	10
18	10		
19	8		
Median	19.00		19
Mean	17.32		19
S.D.	4.70		5.08
S.E.M.	1 .06		1.25

a standard deviation of 4.70 and a standard error of the mean of 1.06. Table 20 also reveals that the measures were obtained.

Non-transported.--The following measures were obtained for the ninth grade pupils in Table 20, non-transported, median of 19, a mean of 19, a standard deviation of 5.08, and a standard error of the mean of 1.25.

Transported.--The measures obtained by the ninth grade transported pupils from the California Social and Related Science Part I, Test II, a median of 12.00, a mean of 13.95, a standard deviation of 9.24 and a standard error of the mean of 2.12.

Non-transported.--The ninth grade non-transported obtained the following measures from the California Social and Related Science, Test, Part I Test II, a median of 10, a mean of 9.70 or 10, a standard deviation of 5.09 and a standard error of the mean of 1.24.

Transported.--The following measures were obtained by the ninth grade transported from the California Social and Related Science Test, Part II Test II, a median of 15.00, a mean of 14.74, a standard deviation of 3.58, and a standard error of the mean of .82.

Non-transported.--The following measures were obtained by the ninth grade non-transported from the California Social and Related Science Test, Part II Test I, a median of 12, a mean of 9.9 or 10, a standard deviation of 7.09, and a standard error of the mean of 1.72.

Comparative Data and "t" Ratio as Indicated in Table 53.--

TABLE 52

CALIFORNIA SOCIAL AND RELATED SCIENCES, PART I TEST II, NINTH
GRADE PUPILS, CEDAR HILL HIGH SCHOOL, CEDARTOWN, GEORGIA

Transported		Non-transported	
Number		Number	
1	39	1	17
2	34	2	16
3	20	3	16
4	20	4	16
5	15	5	13
6	15	6	13
7	15	7	12
8	15	8	11
9	12	9	10
10	12	10	9
11	11	11	9
12	10	12	7
13	10	13	6
14	8	14	6
15	8	15	4
16	8	16	1
17	7	17	0
18	3		
19	3		
Median	12.00	10	
Mean	13.95	9.70	
S.D.	9.24	5.09	
S.E.M.	2.12	1.24	

TABLE 53

COMPARISON OF DATA OBTAINED BY TRANSPORTED AND NON-TRANSPORTED PUPILS
SOCIAL STUDIES, PART I TEST I, NINTH GRADE, CEDAR HILL HIGH
CEDARTOWN, GEORGIA

Group	Achieve- ment in Social Studies	Mean	Sigma	S.E.M.	Sigma $m_1 m_2$	Diff.of Mean	"t"
Transported		17.32	4.70	1.06			
	Achieve- ment in				1.64	1.68	1.03
Non- transport- ed	Social Studies	19	5.08	1.25			

The measures obtained by the ninth grade transported pupils on the California Social and Related Science Test, Part I Test I, Creating a New Nation, a median of 19.00, a mean of 17.32, a standard deviation of 4.70, a standard error of the mean of 1.06. The measures obtained by the ninth grade non-transported pupils on the California Social and Related Science Test, Part I Test I, Creating a New Nation, a median of 19, a mean of 19, a standard deviation of 5.08, and a standard error of the mean of 1.25. There was a significant difference between the transported and non-transported pupils, a standard deviation of two means of 1.64, a difference of means of 1.68, and a "t" score of 1.03. They are at the one percentile in social studies.

Transported.--The measures obtained by the ninth grade transported pupils from the California Social and Related Science, Part I

TABLE 54

COMPARISON OF DATA OBTAINED BY TRANSPORTED AND NON-TRANSPORTED
PUPILS, SOCIAL STUDIES, PART I TEST II, CEDAR HILL
HIGH SCHOOL, CEDARTOWN, GEORGIA

Group	Achieve- ment in Social Studies	Mean	Sigma	S.E.M.	Sigma $m_1 m_2$	Diff.of Mean	"t"
Transported		13.95	9.24	2.12			
	Achieve- ment in Social Studies				2.46	4.25	1.73
Non- transported		9.70	5.09	1.24			

Test II were a median of 12.00, a mean of 13.95, a standard deviation of 9.24, and a standard error of the mean of 2.12.

Non-transported.---The measures obtained by the ninth grade non-transported pupils from the California Social and Related Science Part I Test II were a median of 10, a mean of 9.70, a standard deviation of 5.09, and a standard error of the mean of 1.24.

Comparative Data and "t" Ratio as Indicated in Table 54.---

There was no significant difference between the transported and non-transported pupils, a standard deviation of two means of 2.46, a difference of the mean of 4.25, and a "t" score of 1.73. The classes were at the one percentile.

Comparative Data and "t" Ratio as Indicated in Table 56.---

The measures obtained by the ninth grade transported pupils from the California Social and Related Science Test, Part II Test I,

TABLE 55

CALIFORNIA RELATED SOCIAL AND SCIENCE RELATED TEST, PART II TEST I
NINTH GRADE PUPILS, CEDAR HILL HIGH SCHOOL, CEDARTOWN,
GEORGIA

Transported		Non-transported	
Number		Number	
1	19	1	19
2	19	2	19
3	19	3	19
4	18	4	17
5	17	5	16
6	17	6	15
7	17	7	12
8	16	8	12
9	16	9	12
10	15	10	8
11	15	11	7
12	14	12	4
13	14	13	4
14	13	14	2
15	13	15	2
16	12	16	0
17	11	17	0
18	11		
19	4		
Median	15.00	12	
Mean	14.74	9.9	
S.D.	3.58	7.09	
S.E.M.	.82	1.72	

TABLE 56

COMPARISON OF DATA OBTAINED BY THE TRANSPORTED AND NON-TRANSPORTED
SOCIAL STUDIES, PART II TEST I, NINTH PUPILS, CEDAR HILL
HIGH SCHOOL, CEDARTOWN, GEORGIA

Group	Achieve- ment in Social Studies	Mean	Sigma	S.E.M.	Sigma $m_1 m_2$	Diff.of Mean	"t"
Transported		14.74	3.58	.82			
	Achieve- ment in Social Studies				1.91	4.84	2.53
Non- Transported		9.9	7.09	1.72			

a median of 15.00, a mean of 14.74, a standard deviation of 3.58, and a standard error of the mean of .82. The measures obtained by the ninth grade non-transported from the California Social and Related Science Test I Part II, a median of 12, a mean of 9.9, a standard deviation of 7.09, and a standard error of the mean of 1.72. There was a significant difference between the transported and non-transported pupils, a standard deviation of two means of 1.91, a difference of mean of 4.84, and a "t" score of 2.53. These were at the one percentile.

Transported.--The following measures were obtained by the ninth grade transported pupils from the California Social and Related Science Test, Part II Test II, a median of 13.00, a mean of 12.89, a standard deviation of 4.04, and a standard error of the mean of .93.

TABLE 57

CALIFORNIA SOCIAL AND RELATED SCIENCES, PART II, NINTH GRADE PUPILS
CEDAR HILL HIGH SCHOOL, CEDARTOWN, GEORGIA

Transported		Non-transported	
Number		Number	
1	24	1	23
2	19	2	17
3	17	3	17
4	17	4	17
5	16	5	17
6	14	6	16
7	14	7	16
8	14	8	16
9	13	9	15
10	13	10	15
11	12	11	14
12	12	12	13
13	11	13	13
14	9	14	13
15	9	15	9
16	8	16	8
17	8	17	4
18	8		
19	7		
Median	13.00	15	
Mean	12.89	14	
S.D.	4.04	4.28	
S.E.M.	..93	1.04	

TABLE 58

COMPARISON OF DATA OBTAINED BY THE TRANSPORTED AND NON-TRANSPORTED
PUPILS IN SOCIAL STUDIES, NINTH GRADE PUPILS, PART II
TEST II, CEDAR HILL HIGH SCHOOL, CEDARTOWN GEORGIA

Group	Achieve- ment in Social Studies	Mean	Sigma	S.E.M.	Sigma Diff. of $m_1 m_2$	Mean	"t"
Transported		12.89	4.04	.93			
	Achieve- ment in Social Studies				1.40	1.11	.79
Non- Transported		14	4.28	1.04			

Non-transported.--The table also indicates the following measures were obtained by the ninth grade non-transported from the California Social and Related Science Test, Part II, a median of 15, a mean of 14, a standard deviation of 4.28, and a standard error of the mean of 1.04. There was no significant difference between the transported and non-transported, a standard deviation of two means of 1.40, a difference of the means of 1.11 and a "t" score of .79.

Transported.--The following measures were obtained by the ninth grade transported pupils from the California Social and Related Science Test, Part III Test I, Physical Science, a median of 12.00, a mean of 11.63, a standard deviation of 5.02, a standard error of the mean of 1.15.

Non-transported.--The following measures were obtained by

TABLE 59

CALIFORNIA RELATED SOCIAL AND SCIENCES TEST, PART III TEST I
 PHYSICAL SCIENCE, NINTH GRADE PUPILS, CEDAR HILL HIGH
 SCHOOL, CEDARTOWN, GEORGIA

Transported		Non-transported	
Number		Number	
1	20	1	22
2	20	2	21
3	19	3	19
4	17	4	15
5	15	5	13
6	14	6	13
7	13	7	11
8	12	8	10
9	12	9	10
10	12	10	9
11	12	11	9
12	10	12	7
13	10	13	6
14	8	14	6
15	8	15	0
16	7	16	0
17	6	17	0
18	3		
19	3		
Median	12.00	10	
Mean	11.63	10	
S.D.	5.02	5.05	
S.E.M.	1.15	1.23	

TABLE 60

A COMPARISON OF DATA OBTAINED BY TRANSPORTED AND NON-TRANSPORTED PUPILS, PHYSICAL SCIENCE, NINTH GRADE, CEDAR HILL HIGH SCHOOL, CEDARTOWN, GEORGIA

Group	Achievement in Physical Science	Mean	Sigma	S.E.M.	Sigma $m_1 m_2$	Diff. of Mean	"t"
Transported		11.63	5.02	1.15			
Non-transported	Achievement in Physical Science	10	5.05	1.23	1.68	1.63	.97

the ninth grade, non-transported from the California Social and Related Science Test, Part III Test I, Physical Science, a median of 10, a mean of 20, a standard deviation of 5.05, and a standard error of the mean of 1.23.

Comparative Data and "t" Ratio as Indicated in Table 60.--

The measures obtained by the ninth grade transported pupils from the California Social and Related Science Test, Part III Test I, Physical Science, a median of 12.00, a mean of 11.63, a standard deviation of 5.02, a standard error of the mean of 1.15. The measures obtained by the ninth grade non-transported pupils from the California Social and Related Science Test, Part III Test I, Physical Science, a median of 10, a mean of 10, a standard deviation of 5.05, and a standard error of the mean of 1.23. There was no significant difference between the transported and non-transported, a standard deviation of two means of 1.68, a

TABLE 61

CALIFORNIA SOCIAL AND RELATED SCIENCES, PART III TEST II, BIOLOGICAL
SCIENCE, NINTH GRADE PUPILS, CEDAR HILL HIGH SCHOOL, CEDAR*
TOWN, GEORGIA

Transported		Non-transported	
	Number		Number
1	51	1	31
2	50	2	30
3	49	3	29
4	43	4	28
5	41	5	26
6	32	6	25
7	31	7	16
8	31	8	15
9	31	9	11
10	25	10	10
11	19	11	6
12	19	12	4
13	16	13	0
14	15	14	0
15	13	15	0
16	12	16	0
17	9	17	0
18	2		
19	2		
Median	25.00	11	
Mean	25.68	13.60	
S.D.	15.38	10.60	
S.E.M.	3.52	2.57	

TABLE 62

A COMPARISON OF DATA OBTAINED BY TRANSPORTED AND NON-TRANSPORTED
PUPILS, NINTH GRADE, BIOLOGICAL SCIENCE, PART III TEST II
CEDAR HILL HIGH SCHOOL, CEDARTOWN, GEORGIA

Group	Achieve- ment in Biologi- cal Science	Mean	Sigma	S.E.M.	Sigma		Diff. of Mean "t"
					m ₁	m ₂	
Transported		25.68	15.38	3.52			
	Achieve- ment in Biologi- cal Science				4.36	12.08	2.77
Non- transported		13.60	10.60	2.57			

difference of the mean of 1.63 and a "t" score of .97. These were at the one percentile.

Transported.---The following measures were obtained by the ninth grade transported pupils by the ninth grade transported pupils from the California Social and Related Science Test, Part III Test II, Biological Science, a median of 25.00, a mean of 25.68, a standard deviation of 15.38, and a standard error of the mean of 3.52.

Non-transported.---The following measures were obtained by the ninth grade non-transported pupils from the California Social Science Related Test, Part III Test II, Biological Science, a median of 11, a mean of 13.6 or 14, a standard deviation of 10.60, and a standard error of the mean of 2.57.

Comparative Data and "t" Ratio as Indicated in Table 62.---

The measures obtained by the ninth grade transported pupils from the California Social and Related Science Test, Part III Test II, Biological Science, a median of 25.00, a mean of 25.68, a standard deviation of 15.38, and a standard error of the mean of 3.52.

The measures obtained by the ninth grade non-transported pupils from the California Social and Science Related Test, Part III Part III Test II, Biological Science, a median of 11, a mean of 13.60, and a standard deviation of 10.60, and a standard error of the mean of 2.57. There was a significant difference between the transported and non-transported in favor of transported pupils, a standard deviation of two means of 4.36, a difference of means of 12.08, and a "t" score of 2.77. They are at the one percentile.

Transported.--The following measures were obtained by the ninth grade transported pupils from the California Personality Test, Part I Personal Adjustment, a median of 52.00, a mean of 48.05, a standard deviation of 15.75, a standard error of the mean of 3.62.

Non-transported.--The following measures were obtained by the ninth grade non-transported pupils from the California Personality Test Part I, Personal Adjustment, a Median of 58.00, a mean of 53.69, a standard deviation of 14.61, and a standard error of the mean of 3.65.

Comparative Data and "t" Ratio as Indicated in Table 64.--

The measures obtained by the ninth grade transported pupils from the California Personality Test, Part I, Personal Adjustment, a median of 52.00, a mean of 48.05, a standard deviation of 15.75,

TABLE 63

CALIFORNIA PERSONALITY TEST, NINTH GRADE PUPILS, PERSONAL ADJUST-
MENT, PART I, CEDAR HILL HIGH SCHOOL, CEDARTOWN, GEORGIA

Transported		Non-transported	
Number		Number	
1	76	1	73
2	73	2	69
3	65	3	67
4	62	4	64
5	62	5	64
6	61	6	63
7	55	7	61
8	53	8	58
9	53	9	58
10	52	10	55
11	52	11	47
12	48	12	47
13	40	13	44
14	36	14	34
15	31	15	28
16	30	16	27
17	29	17	27
18	18		
19	17		
Median	52.00		58.00
Mean	48.05		53.69
S.D.	15.78		14.61
S.E.M.	3.62		3.65

TABLE 64

COMPARISON OF DATA OBTAINED BY TRANSPORTED AND NON-TRANSPORTED PUPILS
PERSONALITY TEST, PART I, PERSONAL ADJUSTMENT, CEDAR HILL
HIGH SCHOOL, CEDARTOWN, GEORGIA

Group	Personal Adjust- ment	Mean	Sigma	S.E.M	Sigma $m_1 m_2$	Diff. of Mean	"t"
Transported		48.05	15.78	3.62			
	Personal Adjust- ment				5.14	5.64	1.10
Non- transported		53.69	14.61	3.65			

and a standard error of the mean of 3.62.

The measure obtained by the ninth grade non-transported pupils from the California Personality Test, Part I, Personality Adjustment, a median of 58.00, a mean of 53.69, a standard deviation of 14.65, and a standard error of the mean of 3.65. There was no significant difference between transported and non-transported, a standard deviation of two means of 5.14, a difference of the means of 5.64 and a "t" score of 1.10. The two groups are the twenty percentile.

Transported.--The following measures were obtained by the ninth grade transported pupils from the California Personality Test, Part II, Social Adjustment, a median of 46.00, a mean of 46.84, a standard deviation of 18.62, and a standard error of the mean of 4.27.

Non-transported.--The following measures were obtained by the ninth grade non-transported pupils from the California

TABLE 65

CALIFORNIA PERSONALITY TEST, PART II, SOCIAL ADJUSTMENT, NINTH
GRADE PUPILS, CEDAR HILL HIGH SCHOOL, CEDARTOWN, GEORGIA

Transported		Non-transported	
	Number		Number
1	76	1	77
2	71	2	75
3	70	3	73
4	68	4	62
5	66	5	62
6	61	6	60
7	60	7	60
8	56	8	59
9	49	9	57
10	46	10	55
11	40	11	52
12	39	12	47
13	37	13	42
14	37	14	25
15	33	15	22
16	21	16	22
17	21	17	21
18	20		
19	19		
Median	46.00		58.00
Mean	46.84		53.12
S.D.	18.62		14.48
S.E.M.	4.27		3.62

TABLE 66

COMPARISON OF DATA OBTAINED BY TRANSPORTED AND NON-TRANSPORTED
PUPILS, NINTH GRADE, SOCIAL ADJUSTMENT, PART II, CEDAR
HILL HIGH SCHOOL, CEDARTOWN, GEORGIA

Group	Social Adjust- ment	Mean	Sigma	S.E.M.	Sigma $m_1 m_2$	Diff.of Mean	"t"
Transported		46.84	18.62	4.27			
Non- Transported	Social Adjust- ment	53.12	14.48	3.62	5.60	6.28	1.12

Personality Test, Part II, Social Adjustment, a median of 58.00, a mean of 53.12, a standard deviation of 14.48, and a standard error of the mean of 3.62.

Comparative Data and "t" Ratio as Indicated in Table 66.--

The measures obtained by the ninth grade transported pupils from the California Personality Test, Part II, Social Adjustment, a median of 46.00, a mean of 46.84, a standard deviation of 18.62, and a standard error of the mean of 4.27.

The measures obtained by the ninth grade non-transported pupils from the California Personality Test, Part II, Social Adjustment, a median of 58.00, a mean of 53.12, a standard deviation of 14.48, and a standard error of the mean of 3.62. There was no significant difference between the transported and non-transported, a standard deviation of the two means of 5.60, a difference of the means of 6.28 and a "t" score of 1.12. Both of the ninth grades were at the twenty percentile.

TABLE 67

CALIFORNIA PERSONALITY TEST, TOTAL RESULTS, NINTH GRADE PUPILS
CEDAR HILL HIGH SCHOOL, CEDARTOWN, GEORGIA

Transported		Non-transported	
Number		Number	
1	152	1	150
2	144	2	144
3	135	3	140
4	130	4	126
5	128	5	126
6	129	6	123
7	121	7	121
8	115	8	117
9	109	9	115
10	102	10	110
11	96	11	100
12	92	12	94
13	87	13	86
14	80	14	59
15	72	15	50
16	53	16	50
17	50	17	0
18	41		
19	36		
Median	102		116.0
Mean	98.53		106.0
S.D.	34.68		32.34
S.E.M.	7.95		8.08

TABLE 68

COMPARISON OF DATA OBTAINED BY TRANSPORTED AND NON-TRANSPORTED PUPILS
TOTAL PERSONALITY TEST, NINTH GRADE, CEDAR HILL HIGH SCHOOL
CEDARTOWN, GEORGIA

Group	Personal- ity	Mean	Sigma	S.E.M	Sigma $m_1 m_2$	Diff.of Mean	"t"
Transported=		98.53	34.68	7.95			
Non-	Personal-				11.34	7.47	.66
transported	ity	106.00	32.34	8.08			

Transported.--The following measures were obtained by the ninth grade transported pupils from the California Personality Test, Total Results, a median of 102, a mean of 98.53, a standard deviation of 34.68, and a standard error of the mean of 7.95.

Non-transported.--The following measures were obtained by the ninth grade non-transported pupils from the California Personality Test, Total Results, a median of 116, a mean of 106, a standard deviation of 32.34, and a standard error of the mean of 8.08.

Comparative Data and "t" Ratio as Indicated in Table 68.--The measures obtained by the ninth grade transported pupils from the California Personality Test, Total results, a median of 102, a mean of 98.53, a standard deviation of 34.68 and a standard error of the mean of 7.95. The measures obtained by the ninth grade non-transported pupils from the California Personality Test, total results, a median of 116, a mean of 106, a standard deviation of 32.34,

TABLE 69

SCHOOL MARKS, HEALTH AND PHYSICAL EDUCATION, NINTH GRADE PUPILS
CEDAR HILL HIGH SCHOOL, CEDAR HILL, GEORGIA

Averages	Transported		Non-transported	
	Number	Per Cent	Number	Per cent
96 -100	0	0	0	0
91 - 95	0	0	0	0
86 - 90	3	15.79	3	17.65
81 - 85	4	21.05	2	11.76
76 - 80	5	26.32	4	23.53
71 - 75	3	15.79	3	17.65
66 - 70	2	10.53	4	23.53
61 - 65	1	5.26	1	5.88
51 - 55	0	0	0	0
46 - 50	0	0	0	0
41 - 45	0	0	0	0
Total	19	100.00	17	99.99
Median	78.00	78.00		
Mean	76.95	76.25		
S.D.	8.20	7.65		
. . . S.E.M.	1.89	1.86		

TABLE 70

COMPARISON OF SCHOOL MARKS OBTAINED BY THE TRANSPORTED AND NON-TRANSPORTED PUPILS, NINTH GRADE, HEALTH AND PHYSICAL EDUCATION, CEDAR HILL HIGH SCHOOL, CEDARTOWN, GEORGIA

Group	School Marks Health & Phy- Education	Mean	Sigma	S.E.M	Sigma $m_1 m_2$	Diff.of Mean	"t"
Transported		76.95	8.20	1.89			
	School Marks Health & Phy. Education				2.65	.70	.20
Non-transported		76.25	7.65	1.86			

and a standard error of the mean of 8.08. There was no significant difference between the transported and non-transported pupils, a standard deviation of the two means of 11.34, a difference of the means of 7.47, and a "t" score of .66. Both groups were at the twenty percentile.

Transported.--The school marks made by the ninth grade, transported pupils in Health and Physical Education, a median of 78.00, a mean of 76.95, a standard deviation of 8.20, and a standard error of the mean of 1.89.

Non-transported.--The school marks made by the ninth grade non-transported pupils in Health and Physical Education with a median of 78.00, a mean of 76.25, a standard deviation of 7.65 and a standard error of the mean of 1.86.

Comparative Data and "t" Ratio as Indicated in Table 70.--The

School Marks made by the ninth grade transported pupils in Health and Physical Education, a median of 78.00, a mean of 76.95, a standard deviation of 8.20, and a standard error of the mean of 1.89. The School Marks made by the ninth grade non-transported pupils in Health and Physical Education, a median of 78.00, a mean of 76.25 and a standard error of the mean of 1.86. There was no significant difference between the transported and non-transported pupils, a standard deviation of two means of 2.65, a difference of means of .70 and a "t" score of .26. Both groups average grade was "c".

Transported.--The School Marks made by the ninth grade transported pupils in Mathematics, a median score of 73.00, a mean of 72.75, a standard deviation of 9.25, and a standard error of the mean of 2.12.

Non-transported.--The School Marks made by the ninth grade non-transported pupils in Mathematics, a median score of 73.00, a mean of 73.00, a standard deviation of 6.30, and a standard error of the mean of 1.53.

Comparative Data and "t" Ratio as Indicated in Table 72.--The School Marks made by the ninth grade transported pupils in Mathematics, a median score of 73.00, a mean of 72.75, a standard deviation of 9.25, and a standard error of the mean of 1.53. There was no significant difference between the transported and non-transported pupils, a standard deviation of two means of 2.61, a difference of two means of .25 and a "t" score of .10. The average grade for both groups was "C".

TABLE 71

SCHOOL MARKS, MATHEMATICS, NINTH GRADE PUPILS, CEDAR HILL
HIGH SCHOOL, CEDARTOWN, GEORGIA

Averages	Number	Transported	Non-transported	
		Per cent	Number	Per Cent
96 -100	0	0	0	0
91 - 95	0	0	0	0
86 - 90	0	0	0	0
81 - 85	3	15.79	2	11.76
76 - 80	2	10.53	4	23.53
71 - 75	6	31.57	1	41.18
66 - 70	5	26.32	3	11.76
61 - 65	3	15.79	1	5.88
56 - 60	0	0	1	5.88
51 - 55	0	0	0	0
46 - 50	0	0	0	0
41 - 45	0	0	0	0
Total	19	100.00	17	99.99
Median	73.00	73.00		
Mean	72.75	73.00		
S.D.	9.25	6.30		
S.E.M.	2.12	1.53		

TABLE 72

COMPARISON OF SCHOOL MARKS OBTAINED BY TRANSPORTED AND NON-TRANSPORTED PUPILS, NINTH GRADE, MATHEMATICS
CEDAR HILL HIGH SCHOOL, CEDARTOWN, GEORGIA

Group	School Marks		Sigma	S.E.M.	Sigma		Diff.Of	Mean	"t"
	Mathematics	Mean			m ₁	m ₂			
Transported		72.75	9.25	2.12					
Non-transported	School Marks Mathematics				2.61	.25	.10		
		73.00	6.30	1.53					

Transported.--The School Marks made by the transported pupils in English, a median of 73.00, a mean of 75.65, a standard deviation of 8.00, a standard error of the mean of 1.83.

Non-transported.--The School Marks made by the non-transported pupils in English, a median of 78.00, a mean of 75.95, a standard deviation of 3.85, a standard error of the mean of .93.

Comparative Data and "t" Ratio as Indicated in Table 74.--The School Marks, made by the transported pupils in English, a median of 73.00, a mean of 75.65, a standard deviation of 8.00, a standard error of the mean of 1.83. The School Marks made by non-transported pupils in English, a median of 78.00, a mean of 75.95, a standard deviation of 3.85, a standard error of the mean of .93. There was not any significant difference between the transported and non-transported pupils, a standard deviation of two means of 2.05, a difference of two means of .30, and a "t" score of .15. The average grade for both groups was a "C".

TABLE 73

SCHOOL MARKS, ENGLISH, NINTH GRADE PUPILS, CEDAR HILL
HIGH SCHOOL, CEDARTOWN, GEORGIA

Averages	transported		Non-transported	
	Number	Per cent	Number	Per cent
96 -100	0	0	0	0
91- 95	1	5.26	0	0
86 - 90	2	10.53	0	0
81 - 85	3	10.53	1	5.88
76 - 80	2	10.53	10	58.82
71 - 75	8	42.09	4	23.53
66 - 70	2	10.53	2	11.76
61 - 65	2	10.53	0	0
56 - 60	0	0	0	0
51 - 55	0	0	0	0
46 - 50	0	0	0	0
41 - 45	0	0	0	0
Total	19	100.00	17	99.99
Median	73.00	78.00		
Mean	75.65	75.95		
S.D.	8.00	3.85		
S.E.M.	1.83	.93		

TABLE 74

COMPARISON OF SCHOOL MARKS OBTAINED BY TRANSPORTED AND NON-TRANSPORTED PUPILS, NINTH GRADE, ENGLISH, CEDAR HILL HIGH SCHOOL, CEDARTOWN, GEORGIA

Group	School Marks		Sigma	S.E.M.	Sigma		Diff.of	
	Mathematics	Mean			m_1	m_2	Mean	"t"
Transported		75.65	8.00	1.83				
Non-transported	School Marks Mathematics	75.95	3.85	.93	2.05	.30	.15	

Transported.--The School Marks made by the ninth grade transported pupils in Science, a median of 78.00, a mean of 76.40, a standard deviation of 8.90 and a standard error of the mean of 2.04.

Non-transported.--The School Marks made by the ninth grade non-transported in Science, a median of 73.00, a mean of 77.10, a standard deviation of 5.55, and a standard error of the mean of 1.35.

Comparative Data and "t" Ratio as Indicated in Table 76.--The School Marks made by the ninth grade transported pupils in Science, a median of 78.00, a mean of 76.40, a standard deviation of 8.90, and a standard error of the mean of 2.04. The School Marks made by the ninth grade non-transported pupils in science, a median score of 73.00, a mean of 77.10, a standard deviation of 5.55, and a standard error of the mean of 1.35. There was no

TABLE 75

SCHOOL MARKS, NINTH GRADE PUPILS, SCIENCE, CEDAR HILL HIGH
CEDARTOWN, GEORGIA

Averages	Transported		Non-transported	
	Number	Per cent	Number	Per cent
96 -100	1	5.26	0	0
91 - 95	0	0	0	0
86 - 90	3	15.79	2	11.76
81 - 85	2	10.53	1	5.88
76 - 80	5	26.32	6	35.29
71 - 75	3	15.79	7	41.18
66 - 70	2	10.53	1	5.88
61 - 65	1	5.26	0	0
56 - 60	2	10.53	0	0
51 - 55	0	0	0	0
41 - 45	0	0	0	0
Total	19	100.00	17	99.99
Median	78.00	73.00		
Mean	76.40	77.10		
S.D.	8.90	5.55		
S.E.M.	2.04	1.35		

TABLE 76

COMPARISON OF SCHOOL MARKS OBTAINED BY TRANSPORTED AND NON-TRANSPORTED PUPILS, NINTH GRADE, SCIENCE, CEDAR HILL HIGH SCHOOL, CEDARTOWN, GEORGIA

Group	School Marks Science-	Mean	Sigma	S.E.M.	Sigma $m_1 m_2$	Diff. of Mean	"t"
Transported		76.40	8.90	2.04			
Non-transported	School Marks Science	77.10	5.55	1.35	2.45	.70	.29

significant difference between the transported and non-transported, a standard deviation of two means of 2.45, a difference of the two means of .70 and a "t" score of .29. The average grade for transported and non-transported was a grade of "C".

Transported.--The School Marks made by the ninth grade transported pupils in vocational subjects, a median of 78.00, a mean of 83.00, a standard deviation of 9.25, a standard error of the mean of 2.12.

Non-transported.--The School Marks made by the ninth grade non-transported pupils in vocational subjects, a median of 78.00, a mean of 77.10, a standard deviation of 8.10, and a standard error of the mean of 1.97.

TABLE 77
 "SCHOOL MARKS"
 VOCATIONAL SUBJECTS NINTH GRADE
 CEDAR HILL HIGH SCHOOL, CEDARTOWN, GEORGIA

Averages	Transported		Nontransported	
	Number	Per Cent	Number	Per Cent
96-100	1	5.26	1	5.88
91-95	1	5.26	0	0
89-90	1	5.26	2	11.76
81-85	2	10.53	0	0
76-80	5	26.32	7	41.18
71-75	7	36.84	4	23.53
66-70	2	10.53	2	11.76
61-65	0	0	1	5.88
56-60	0	0	0	0
51-55	0	0	0	0
41-45	0	0	0	0
Total	19	100.00	17	99.99
Median	78.00		78.00	
Mean	83.00		77.10	
S. D.	9.25		8.10	
S. E. M.	2.12		1.97	

Comparative Data and "t" Ratio as indicated in Table 78. --

The "school marks" made by the ninth grade transported pupils in vocational subjects, a median of 78.00, a mean of 83.00, a standard deviation of 9.25, and a standard error of the mean of 2.12. The "school marks" made by the ninth grade nontransported pupils in vocational subjects; a median of 78.00, a mean of 77.10, a standard deviation of 8.10, and a standard error of the mean of 1.97. There was no significant difference between the transported and nontransported, a standard deviation of two means of 2.89, a difference of two means of 5.90 and a "t" score of 2.04. The average grade for the transported was grade of "B". The average grade for the nontransported was a grade of "C".

TABLE 78

COMPARISON OF "SCHOOL MARKS" OBTAINED BY
TRANSPORTED AND NONTRANSPORTED PUPILS
NINTH GRADE VOCATIONAL SUBJECTS
CEDAR HILL HIGH SCHOOL, CEDARTOWN, GEORGIA

Group	"School Marks"		Sigma	S.E.M.	Sigma Diff. of		
	Vocational Subjects	Mean			M ₁ M ₂	Mean	"t"
Transported		83.00	9.25	2.12			
	"School Marks"				2.89	5.90	2.04
Non	Vocational Subjects						
Transported		77.10	8.10	1.97			

STATISTICAL ANALYSIS OF ELEVENTH GRADE

Transported. -- The measures obtained by the eleventh grade transported pupils in reading: a median of 8.0, a mean of 8.3, a standard deviation of .66 and a standard error of the mean of 20.

Nontransported. -- The measures obtained by the eleventh grade non-transported pupils in reading: a median of 7.8, a mean of 8.3, a standard deviation of 1.54, and a standard error of the mean of .39.

TABLE 79

CALIFORNIA ACHIEVEMENT TEST RESULTS
ELEVENTH GRADE READING GRADE PLACEMENTS
CEDAR HIGH SCHOOL, CEDARTOWN, GEORGIA

Transported		Nontransported	
1	12.8	1	10.6
2	11.1	2	10.0
3	9.4	3	8.8
4	8.6	4	8.7
5	8.4	5	8.7
6	8.0	6	8.0
7	7.6	7	8.0
8	6.6	8	7.9
9	6.6	9	7.7
10	6.1	10	7.6
11	5.8	11	7.0
		12	6.9
		13	6.4
		14	6.2
		15	5.7
		16	5.1
Median	8.0		7.8
Mean	8.3		8.3
S. D.	.66		1.54
S. E. M.	.20		.39

Comparative Data and "t" Ratio as Indicated in Table 80. -- The measures obtained by the eleventh grade transported pupils in reading:

a median of 8.0, a mean of 8.3, a standard deviation of .66, and a standard error of the mean of .20. The measures obtained by the eleventh grade nontransported pupils in reading: a median of 7.8, a mean of 8.3, a standard deviation of 1.54, and a standard error of the mean of .39. There was no significant difference between the transported and nontransported pupils, a standard deviation of two means of .44, a difference of the mean of .0 and a "t" score of 0. The transported and nontransported were seven years and four months below national norms.

TABLE 80
COMPARISON OF DATA OBTAINED BY TRANSPORTED AND
NONTRANSPORTED PUPILS IN ELEVENTH GRADE READING
OF CEDAR HIGH SCHOOL CEDARTOWN, GEORGIA

Group	Achievement in Reading	Mean	Sigma	S.E.M.	Sigma M ₁ M ₂	Diff. of Mean "t"
Transported		8.3	.66	.20		
Non- Transported	Achievement in Reading	8.3	1.54	.39	.44	0 0

Transported. -- The measure made by the eleventh grade transported pupils in arithmetic, a median of 7.1, a mean of 7.6, a standard deviation of 1.86, and a standard error of the mean of .56. The measures made by the eleventh grade nontransported pupils, in arithmetic, a median of 6.7, a mean of 6.7, a standard deviation of .63, and a standard error of the mean of .16.

TABLE 81

CALIFORNIA ACHIEVEMENT TEST RESULTS
ELEVENTH GRADE ARITHMETIC GRADE PLACEMENT
CEDAR HIGH SCHOOL, CEDARTOWN, GEORGIA

Transported		Nontransported	
Number		Number	
1	12.5	1	7.7
2	9.1	2	7.6
3	8.4	3	7.6
4	7.7	4	7.2
5	7.3	5	7.1
6	7.1	6	7.0
7	6.7	7	6.7
8	6.6	8	6.7
9	6.3	9	6.7
10	6.3	10	6.3
11	6.1	11	6.2
		12	6.2
		13	6.1
		14	6.0
		15	5.8
		16	5.7
Median	7.1		6.7
Mean	7.6		6.7
S. D.	1.86		.63
S. E. M.	.56		.16

Comparative Data and "t" Ratio as Indicated in Table 82. *— The measures made by the eleventh grade transported pupils in arithmetic, a median of 7.1, a mean of 7.6, a standard deviation of 1.86, and a standard error of the mean of .56. The measures made by the eleventh grade nontransported in arithmetic; a median of 6.7, a mean of 6.7,

a standard deviation of .63, and a standard error of the mean of .16. There was no significant difference between the transported and non-transported pupils, a standard deviation of the two means of .58, a difference of the means of 1.1 and a "t" score of 1.90. The transported pupils were four years and one month below norm. The non-transported pupils were five years below the norm.

TABLE 82

COMPARISON OF DATA OBTAINED BY THE TRANSPORTED AND
NONTRANSPORTED PUPILS ELEVENTH GRADE ARITHMETIC
CEDAR HIGH SCHOOL, CEDARTOWN, GEORGIA

Group	Achievement Arithmetic	Mean	Sigma	S.E.M.	Sigma M ₁ M ₂	Diff. of Mean	"t"
Transported		7.6	1.86	.56			
Non- Transported	Achievement Arithmetic	6.7	.63	.16	5.8	1.1	1.90

Transported. *— The measures obtained by the eleventh grade transported pupils in language, a median of 8.8, a mean of 8.9, a standard deviation of 1.84, and a standard error of the mean of .55.

Nontransported. *— The measures obtained by the eleventh grade nontransported pupils in language, a median of 7.5, a mean of 8.0, a standard deviation of 1.49, and a standard error of the mean of .37.

TABLE 83

CALIFORNIA ACHIEVEMENT TEST RESULTS ELVENTH GRADE
 LANGUAGE GRADE PLACEMENT
 CEDAR HIGH SCHOOL, CEDARTOWN, GEORGIA

Transported		Nontransported	
Number	Score	Number	Score
1	13.4	1	11.4
2	9.8	2	9.7
3	9.7	3	9.6
4	9.4	4	9.6
5	9.3	5	9.5
6	8.8	6	9.1
7	8.8	7	7.8
8	8.4	8	7.5
9	6.9	9	7.4
10	6.8	10	7.3
11	6.3	11	7.2
		12	7.1
		13	7.0
		14	6.7
		15	6.1
		16	5.9
Median	8.8		7.5
Mean	8.9		8.0
S. D.	1.84		1.49
S. E. M.	.55		.37

Comparative Data, and "t" Ratio as Indicated in Table 84. --
 The measures obtained by the eleventh grade transported pupils in language, a median of 8.8, a mean of 8.9, a standard deviation of 1.84 and a standard error of the mean of .55. The measures obtained by the eleventh grade nontransported pupils in language, a median of 7.5, a mean of 8.0, and standard deviation of 1.49, and a standard error of the mean of .37. There was no significant difference between the transported and nontransported pupils, a standard deviation of two means of .66, a difference of means of .9, and a "t" score of 1.36. The transported pupils were two years and six months below the norm. The nontransported pupils were three years and seven months below the norm.

TABLE 84
 COMPARISON OF DATA OBTAINED BY THE TRANSPORTED AND
 NONTRANSPORTED PUPILS, LANGUAGE ELEVENTH GRADE
 CEDAR HIGH SCHOOL, CEDARTOWN, GEORGIA

Group	Achievement in Language	Mean	Sigma	S.E.M.	Sigma M ₁ M ₂	Diff. of Mean	"t"
Transported		8.9	1.84	.55			
Non- Transported	Achievement in Language	8.0	1.49	.37	.66	.9	1.36

Transported. -- The measures obtained by the eleventh grade transported in total test, a median of 7.9, a mean of 8.3, a standard deviation of 1.83, and a standard error of the mean of .55.

TABLE 85

CALIFORNIA ACHIEVEMENT TEST RESULTS
 TOTAL TEST ELEVENTH GRADE
 CEDAR HIGH SCHOOL, CEDARTOWN, GEORGIA

Transported		Nontransported	
Number	Score	Number	Score
1	12.9	1	9.7
2	10.0	2	9.1
3	8.7	3	8.7
4	8.5	4	8.5
5	8.3	5	8.1
6	7.9	6	7.8
7	7.7	7	7.7
8	7.3	8	7.4
9	7.0	9	7.2
10	6.3	10	7.0
11	6.3	11	6.7
		12	6.7
		13	6.4
		14	6.4
		15	6.3
		16	5.9
Median	7.9	7.3	
Mean	8.3	7.5	
S. D.	1.83	1.14	
S. E. M.	.55	.29	

Nontransported.---The measures obtained by the eleventh grade nontransported in total test, a median of 7.3, a mean of 7.5, a standard deviation of 1.14, and a standard error of the mean of 2.9.

Comparative Data and "t" Ratio as Indicated in Table 86.---The measures obtained by the eleventh grade transported in total test, a median of 7.9, a mean of 8.3, a standard deviation of 1.38, and a standard error of the mean of .55. The measures obtained by the eleventh grade nontransported in total test, a median of 7.3, a mean of 7.5, a standard deviation of 1.14, and a standard error of the mean of .29. There was no significant difference between the transported and nontransported pupils, a standard deviation of two means of .62, a difference of means of .8, and a "t" score of 1.29. The transported pupils were three years and four months below the norm. The nontransported pupils were four years and two months below the norm.

TABLE 86

COMPARISON OF DATA OBTAINED BY THE TRANSPORTED AND
NONTRANSPORTED PUPILS ELEVENTH GRADE TOTAL TEST
CEDAR HIGH SCHOOL, CEDARTOWN, GEORGIA

Group	Total Achievement Test	Mean	Sigma	S.E.M.	Sigma M_1M_2	Diff. of Mean	"t"
Transported		8.3	1.83	.55			
Non-Transported	Total Achievement Test	7.5	1.14	.29	.62	.8	1.29

Transported.---The measures obtained by the eleventh grade transported intelligence quotients, a median of 90, a mean of 92, a

TABLE 87

INTELLIGENCE QUOTIENTS ELEVENTH GRADE
CEDAR HIGH SCHOOL, CEDARTOWN, GEORGIA

Transported		Nontransported	
Number	Score	Number	Score
1	106	1	97
2	99	2	97
3	94	3	94
4	94	4	94
5	90	5	94
6	90	6	94
7	90	7	90
8	90	8	90
9	86	9	86
10	86	10	86
11	86	11	86
		12	86
		13	86
		14	86
		15	86
		16	86
Median	90	88	
Mean	92	90.5	
S. D.	6.16	4.26	
S. E. M.	1.85	1.06	

standard deviation of 6.16, and a standard error of the mean of 1.85.

Nontransported.--The measures obtained by the eleventh grade nontransported, intelligence quotients, a median of 88, a mean of 90.5, a standard deviation of 4.26, and a standard error of the mean of 1.06.

Comparative Data and "t" Ratio as Indicated in Table 88.--The measures obtained by the eleventh grade transported intelligence quotients, a median of 90, a mean of 92, a standard deviation of 6.16, and a standard error of the mean of 1.85. The measures obtained by the eleventh grade nontransported intelligence quotients, a median of 88, a mean score of 90.5, a standard deviation of 4.26, and a standard error of the mean of 1.06. There was no significant difference in intelligence, a standard deviation of two means of 2.13, a difference of two means of 1.5 and "t" score of .61. The intelligence of the transported and nontransported pupils is average.

TABLE 88

COMPARISON OF INTELLIGENCE QUOTIENTS OBTAINED BY THE
TRANSPORTED AND NONTRANSPORTED PUPILS ELEVENTH GRADE
CEDAR HIGH SCHOOL, CEDARTOWN, GEORGIA

Group	Intelligence Quotients	Mean	Sigma	S.E.M.	Sigma M ₁ M ₂	Diff. of Mean	"t"
Transported		92	6.16	1.85			
Non- Transported	Intelligence Quotients	90	4.26	1.06	2.13	1.5	.61

Transported.--The measures obtained by the eleventh grade transported pupils from the California Social and Related Science Test Part

TABLE 89

CALIFORNIA SOCIAL AND RELATED SCIENCE TEST
 PART I TEST I ELEVENTH GRADE
 CEDAR HIGH SCHOOL, CEDARTOWN, GEORGIA

Transported		Nontransported	
Number	Score	Number	Score
1	32	1	30
2	32	2	29
3	24	3	29
4	23	4	29
5	22	5	26
6	21	6	23
7	19	7	23
8	18	8	23
9	17	9	22
10	12	10	19
11	11	11	18
		12	18
		13	17
		14	17
		15	17
		16	16
Median	21		22.5
Mean	21.9		22
S. D.	6.99		4.84
S. E. M.	2.11		1.21

I, Test I a median of 21, a mean of 21.9, a standard deviation of 6.99, and a standard error of the mean of 2.11. The measures obtained by the eleventh grade nontransported pupils, from the California Social and Related Science Test, Part I Test I, a median of 22.5, a mean of 22, a standard deviation of 4.84, and a standard error of the mean of 1.21.

Comparative Data and "t" Ratio as Indicated in Table 90. -- The measures obtained by the eleventh grade transported pupils from the California Social and Related Sciences Test Part I Test I, a median of 21, a mean of 21.9, a standard deviation of 6.99, and a standard error of the mean of 2.11. The measures obtained by the eleventh grade non-transported pupils from the California Social and Related Science Test Part I Test I, a median of 22.5, a mean of 22, a standard deviation of 4.84, and a standard error of the mean of 1.21. There was no significant difference between transported and nontransported pupils, a standard deviation of two means of 2.43, a difference of the means of .1 and a "t" score of .04. The transported and non-transported pupils were at the one percentile.

TABLE 90

COMPARISON OF DATA OBTAINED BY THE TRANSPORTED AND
NONTRANSPORTED PUPILS PART I TEST I SOCIAL STUDIES ELEVENTH GRADE
CEDAR HIGH SCHOOL, CEDARTOWN, GEORGIA

Group	Social Studies	Mean	Sigma	S.E.M.	Sigma M ₁ M ₂	Diff. of Mean	"t"
Transported		21.9	6.99	2.11			
Non- Transported	Social Studies	22	4.84	1.21	2.43	.1	.04

TABLE 91

CALIFORNIA SOCIAL AND RELATED SCIENCE TEST
 PART I TEST II ELEVENTH GRADE
 CEDAR HIGH SCHOOL, CEDARTOWN, GEORGIA

Transported		Nontransported	
Number	Score	Number	Score
1	20	1	21
2	18	2	19
3	16	3	18
4	13	4	18
5	12	5	17
6	7	6	17
7	7	7	16
8	6	8	15
9	1	9	15
10	1	10	15
11	0	11	14
		12	12
		13	7
		14	0
		15	0
		16	0
Median	7	15	
Mean	9	12.81	
S. D.	7.09	8.36	
S.E.M.	2.14	2.09	

Transported.--The measures obtained by the eleventh grade transported pupils from the California Social and Related Science Part I Test II, a median of 7, a mean of 9, a standard deviation of 7.09, and a standard error of the mean of 2.14.

Nontransported.--The measures obtained by the eleventh grade nontransported pupils from the California Social and Related science Part I Test II, a median of 15, a mean of 12.81, a standard deviation of 8.36, and a standard error of the mean of 2.09.

Comparative Data and "t" Ratio as Indicated in Table 92.--The measures obtained by the eleventh grade transported pupils from the California Social and Related Science Test Part I, Test II, a median of 7, a mean of 9, a standard deviation of 7.09 and a standard error of the mean of 2.14. The measures obtained by the eleventh grade nontransported pupils from the California Social and Related Science Test Part I Test II, a median of 15, a mean of 12.8, a standard deviation of 8.36, and a standard error of the mean of 2.09. There was no significant difference between the transported and ontransported pupils, a deviation of the two means of 2.99, a difference of the means of 3.81, and a "t" score of 1.27. The classes were at the one percentile in social studies.

TABLE 92

COMPARISON OF DATA OBTAINED BY THE TRANSPORTED AND
NONTRANSPORTED PUPILS PART I TEST II SOCIAL STUDIES
ELEVENTH GRADE CEDAR HIGH SCHOOL, CEDARTOWN, GEORGIA

Group	Social Studies	Mean	Sigma	S.E.M.	Sigma M ₁ M ₂	Diff. of Mean	"t"
Transported		9	7.09	2.14			
Non- Transported	Social Studies	12.81	8.36	2.09	2.99	3.81	1.27

TABLE 93

CALIFORNIA SOCIAL AND RELATED SCIENCE
 PART II TEST I ELEVENTH GRADE
 CEDAR HIGH SCHOOL, CEDARTOWN, GEORGIA

Transported		Nontransported	
Number	Score	Number	Score
1	31	1	27
2	24	2	23
3	23	3	22
4	22	4	20
5	19	5	19
6	18	6	19
7	18	7	17
8	18	8	17
9	16	9	17
10	14	10	16
11	8	11	14
		12	14
		13	14
		14	13
		15	12
		16	0
Median	18		17.00
Mean	19.18		16.50
S. D.	5.52		3.93
S. E. M.	1.66		.98

Transported.-- The measures obtained by the eleventh grade transported pupils from the California Social and Related Science Test, Part II Test I, a median of 18, a mean of 19.18, a standard deviation of 5.52, and a standard error of the mean of 1.66.

Nontransported.--The measures obtained by the eleventh grade nontransported pupils from the California Social and Related Science Test, Part II Test I, a median of 17.00, a mean of 16.50, a standard deviation of 3.93, and a standard error of the mean of .98.

TABLE 94

COMPARISON OF DATA OBTAINED BY THE TRANSPORTED AND
NONTRANSPORTED PUPILS ELEVENTH GRADE PART II
SOCIAL STUDIES TEST I
CEDAR HIGH SCHOOL, CEDARTOWN, GEORGIA

Group	Social Studies	Mean	Sigma	S. E. M.	Sigma M_1M_2	Diff. of Mean	"t"
Transported		19.18	5.52	1.66			
Non Transported	Social Studies	16.50	3.93	.98	1.93	2.68	1.39

Comparative Data and "t" Ratio as Indicated in Table 94.--The measures obtained by the eleventh grade transported pupils from the California Social and Related Science Test Part II Test I, a median of 18, a mean of 19.18, a standard deviation of 5.52, and a standard error of the mean of 1.66. The measures obtained by the eleventh grade nontransported pupils from the California Social and Related Science Test, Part II Test I, a median of 17.00, a mean of 16.50, a standard deviation of 3.93, and a standard error of the mean of .98.

TABLE 95

CALIFORNIA SOCIAL AND RELATED SCIENCE
 PART II TEST II ELEVENTH GRADE
 CEDAR HIGH SCHOOL, CEDARTOWN, GEORGIA

Transported		Nontransported	
Number	Score	Number	Score
1	23	1	20
2	22	2	19
3	19	3	18
4	18	4	17
5	18	5	17
6	18	6	16
7	15	7	15
8	15	8	15
9	14	9	14
10	13	10	12
11	12	11	12
		12	12
		13	11
		14	11
		15	11
		16	7
Median	18.00	14.50	
Mean	17.90	15	
S. D.	3.53	3.53	
S. E. M.	1.06	.88	

There were no significant differences between transported and nontransported pupils, a standard deviation of two means of 1.93, a difference of the means of 2.68, and a "t" score of 1.39. The two groups were at the one percentile norm.

Transported.--The measures obtained by the eleventh grade transported pupils, from the California Social and Related Science Test Part II Test II, a median of 18.00, a mean of 17.90, a standard deviation of 3.53, and a standard error of the mean of 1.06.

Nontransported.--The measures obtained by the eleventh grade nontransported pupils from the California Social and Related Science Test Part II Test II, a median of 14.5, a mean of 15, a standard deviation of 3.53, and a standard error of the mean of .88.

Comparative Data and "t" Ration as Indicated in Table 96.--The measures obtained by the eleventh grade transported pupils, from the California Social and Related Science Test, Part II Test II, a median of 18.00, a mean of 17.90, a standard deviation of 3.53, and a standard error of mean of 1.06.

The measures obtained by the eleventh grade nontransported pupils, from the California Social and Related Science Test Part II Test II, a median of 14.50, a mean of 15, a standard deviation of 3.53, and a standard error of the mean of .88. There was no significant differences between the transported and nontransported pupils, a standard deviation of the two means of 1.38, a difference of the means of 2.90, and a "t" score of 2.10. The groups were at the one percentile.

Transported.--The measures obtained by the eleventh grade transported pupils from the California Social and Related Science Test

TABLE 97

CALIFORNIA SOCIAL AND RELATED SCIENCE PHYSICAL SCIENCE
 PART III TEST I ELEVENTH GRADE
 CEDAR HIGH SCHOOL, CEDARTOWN, GEORGIA

Transported		Nontransported	
Number	Score	Number	Score
1	44	1	42
2	38	2	41
3	36	3	36
4	33	4	36
5	32	5	34
6	31	6	32
7	30	7	31
8	29	8	30
9	28	9	28
10	21	10	26
11	21	11	25
		12	25
		13	24
		14	21
		15	18
		16	16
Median	31	29	
Mean	31.17	29	
S. D.	6.48	7.35	
S. E. M.	1.38	1.84	

Part II Test I Physical Science, a median of 31, a mean of 31.17, a standard deviation of 6.48, and a standard error of the mean of 1.38.

Nontransported.--The measures obtained by the eleventh grade nontransported pupils from the California Social and Related Science Test, Part III Test I Physical Science, a median of 29, a mean of 29, a standard deviation of 7.35, and a standard error of the mean of 1.84.

TABLE 96

COMPARISON OF DATA OBTAINED BY THE TRANSPORTED AND
NONTRANSPORTED PUPILS ELEVENTH GRADE
SOCIAL STUDIES PART II TEST II
CEDAR HIGH SCHOOL, CEDARTOWN, GEORGIA

Group	Social Studies	Mean	Sigma	S.E.M.	Sigma M ₁ M ₂	Diff. of Mean	Diff. of "t"
Transported		17.90	3.53	1.06	.		
Non	Social				1.38	2.90	2.10
Transported	Studies	15	3.53	.88			

Comparative Data and "t" Ratio as Indicated in Table 98.--The measures obtained by the eleventh grade transported pupils from the California Social and Related Science Test Part III Test I Physical Science, a median of 31, a mean of 31.17, a standard deviation of 6.48, and a standard error of the mean of 1.38.

The measures obtained by the eleventh grade nontransported pupils from the California Social and Related Science Test, Part III Test I Physical Science, a median of 29, a mean of 29, a standard deviation of 7.35, and a standard error of the mean of 1.84.

There was no significant difference between the transported and nontransported pupils, a standard deviation of two means of 2.30, a differences of the mean of 2.17, and a "t" score of .94. The group were at the two percentile.

TABLE 98

COMPARISON OF DATA OBTAINED BY THE TRANSPORTED AND
NONTRANSPORTED PUPILS ELEVENTH GRADE
PART III PHYSICAL SCIENCE TEST I
CEDAR HIGH SCHOOL, CEDARTOWN, GEORGIA

Group	Physical Science	Mean	Sigma	S.E.M.	Sigma M ₁ M ₂	Diff. of Mean	"t"
Transported		31.17	6.48	1.38			
Non- Transported	Physical Science	29	7.35	1.84	2.30	2.17	.94

Transported.--The measures obtained by the eleventh grade transported pupils from the California Social and Related Science Test, Part III Test II Biological Science, a median of 43, a mean of 46, a standard deviation of 9.78, and a standard error of the mean of 2.95.

Nontransported.--The measures obtained by the eleventh grade non-transported pupils from the California Social and Related Science Test, Part III, Test II, Biological Science, a median of 40.00, a mean of 40.38, a standard deviation of 10.40, and a standard error of the mean of 2.60.

Comparative Data and "t" Ratio as indicated in Talbe 100.--The measures obtained by the eleventh grade transported pupils from the California Social and Related Science Test Part III Test II Biological Science, a median of 43, a mean of 46, a standard deviation of 9.78,

TABLE 99

CALIFORNIA SOCIAL AND RELATED SCIENCE BIOLOGICAL
 PART III TEST II ELEVENTH GRADE
 CEDAR HIGH SCHOOL, CEDARTOWN, GEORGIA

Transported		Nontransported	
Number	Score	Number	Score
1	67	1	61
2	59	2	56
3	49	3	54
4	48	4	47
5	47	5	42
6	43	6	41
7	42	7	41
8	39	8	40
9	38	9	40
10	37	10	40
11	36	11	36
		12	36
		13	34
		14	32
		15	29
		16	17
Median	43	40.00	
Mean	46	40.38	
S. D.	9.78	10.40	
S. E. M.	2.95	2.60	

TABLE 101

CALIFORNIA PERSONALITY TEST RESULTS PART I
 PERSONAL ADJUSTMENT ELEVENTH GRADE
 CEDAR HIGH SCHOOL, CEDARTOWN, GEORGIA

Transported		Nontransported	
Number	Score	Number	Score
1	59	1	72
2	55	2	68
3	53	3	65
4	52	4	60
5	49	5	60
6	49	6	55
7	47	7	51
8	46	8	51
9	41	9	50
10	37	10	47
11	35	11	46
		12	42
		13	42
		14	37
		15	36
		16	34
Median	49		50.35
Mean	48		51
S. D.	7.25		11.23
S. E. M.	2.18		2.81

and a standard error of the mean of 2.95.

The measures obtained by the eleventh grade non-transported pupils from the California Social and Related Science Test, Part III Test II Biological Science, a median of 40.00, a mean of 40.38, a standard deviation of 10.40, and a standard error of the mean of 2.60. There was no significant difference between the transported and non-transported, a standard deviation of two means of 3.93, a difference of two means of 5.62, and a "t" score of 1.43. The transported pupils were at the thirty percentile, and the nontransported pupils were at the ten percentile.

TABLE 100

COMPARISON OF DATA OBTAINED BY THE TRANSPORTED AND
NONTRANSPORTED PUPILS PART III TEST II
BIOLOGICAL SCIENCE ELEVENTH GRADE
CEDAR HIGH SCHOOL, CEDARTOWN, GEORGIA

Group	Biological Science	Mean	Sigma	S. E. M.	Sigma M ₁ M ₂	Diff. of Mean	Diff. of "t"
Transported		46	9.78	2.95			
Non- Transported	Biological Science	40.38	10.40	2.60	3.93	5.62	1.43

Transported.--The measures obtained by the eleventh grade transported pupils from the California Personality Test, Part I Personal Adjustment, a median of 49, a mean of 48, a standard deviation of 7.25, a standard error of the mean of 2.18.

Nontransported.--The measures obtained by the eleventh grade nontransported pupils from the California Personality Test, Part I,

Personal Adjustment, a median of 50.51, a mean of 51, a standard deviation of 11.23, and a standard error of the mean of 2.81.

Comparative Data and "t" Ratio as Indicated in Table 102.--The measures obtained by the eleventh grade transported pupils from the California Personality Test, Part I Personal Adjustment, a median of 49, a mean of 48, a standard deviation of 7.25, a standard error of the mean of 2.18.

The measures obtained by the eleventh grade nontransported pupils from the California Personality Test, Part I Personal Adjustment, a median of 50.51, a mean of 51, a standard deviation of 11.23, and a standard error of the mean of 2.81. There was no significant difference between the transported and nontransported, a standard deviation of two means of 3.56, a difference of the means of 3.00, and a "t" score of .84. The transported pupils were at the twenty percentile, also the nontransported pupils.

TABLE 102

COMPARISON OF DATA OBTAINED BY THE TRANSPORTED AND
NONTRANSPORTED PUPILS PERSONALITY TEST PART I
PERSONAL ADJUSTMENT
CEDAR HIGH SCHOOL, CEDARTOWN, GEORGIA

Group	Personal Adjustment	Mean	Sigma	S. E. M.	Sigma M ₁ M ₂	Diff. of Mean	Diff. of "t"
Transported		48	7.25	2.18			
Non- Transported	Personal Adjustment	51	11.23	2.81	3.56	3.00	.84

TABLE 103

CALIFORNIA ACHIEVEMENT RESULTS PART II
 SOCIAL ADJUSTMENT ELEVENTH GRADE
 CEDAR HIGH SCHOOL, CEDARTOWN, GEORGIA

Transported		Nontransported	
Number	Score	Number	Score
1	68	1	73
2	67	2	62
3	63	3	55
4	60	4	54
5	58	5	53
6	58	6	50
7	54	7	49
8	52	8	49
9	51	9	49
10	49	10	45
11	47	11	42
		12	37
		13	37
		14	34
		15	27
		16	15
Median	58		49
Mean	57		46
S. D.	6.83		13.79
S. E. M.	2.06		3.45

Transported.--The measures obtained by the eleventh grade transported pupils from the California Personality Test Part II Social Adjustment, a median of 58, a mean of 57, a standard deviation of 6.83 and a standard error of the mean of 2.06.

Nontransported.--The measures obtained by the eleventh grade nontransported pupils from the California Personality Test, Part II Social adjustment, a median of 49, a mean of 46, a standard deviation of 13.79, and a standard error of the mean of 3.45

Comparative Data and "t" Ratio as Indicated in Table 104.--The measures obtained by the eleventh grade transported pupils from the California Personality Test, Part II Social adjustment, a median of 58, a mean of 57, a standard deviation of 6.83, and a standard error of the mean of 2.06. The measures obtained by the eleventh grade nontransported pupils from the California Personality Test, Part II, Social Adjustment, a median of 49, a mean of 46, a standard deviation of 13.79, and a standard error of the mean of 3.45, the standard deviation of two means of 4.02, a difference of the means of 11.00, and a "t" score of 2.74. There was a significant difference between the transported and nontransported pupils in favor of transported pupils.

Transported.--The measures obtained by the eleventh grade transported pupils from the California Personality Test Total Test, a median of 104, a mean of 104, a standard deviation of 13.70, and a standard error of the mean of 4.12.

TABLE 104

COMPARISON OF DATA OBTAINED BY THE TRANSPORTED AND
NONTRANSPORTED PUPILS CALIFORNIA PERSONALITY TEST
SOCIAL ADJUSTMENT PART II ELEVENTH GRADE
CEDAR HIGH SCHOOL, CEDARTOWN, GEORGIA

Group	Social Adjustment	Mean	Sigma	S. E. M.	Sigma M ₁ M ₂	Diff. of Mean	"t"
Transported		57	6.83	2.06			
Non Transported	Social Adjustment	46	13.79	3.45	4.02	11.00	2.74

Nontransported.--The measures obtained by the eleventh grade nontransported pupils from the California Personality Test, Total Test, a median of 96, a mean of 97, a standard deviation of 20.70, and a standard error of the mean of 5.18.

Comparative Data and "t" Ratio as Indicated in Table 106.-- The measures obtained by the eleventh grade transported pupils from the California Personality Test, Total Test, a median of 104, a mean of 104, a standard deviation of 13.70, and a standard error of the mean of 4.12. The measures obtained by the eleventh grade nontransported pupils from the California Personality Test, total test, a median of 96, a mean of 97, a standard deviation of 20.70, and a standard error of 5.18. There was no significant difference between the transported and non-transported a standard deviation of two means of 6.62, a difference of two means of 7.00, and a "t" score of 1.06. The transported and nontransported pupils are at the forty percentile.

Transported.-- The measures obtained in "school marks" by the eleventh grade transported pupils, a median of 73.00, a mean of 73.00,

TABLE 105

CALIFORNIA PERSONALITY TEST TOTAL TEST
ELEVENTH GRADE
CEDAR HIGH SCHOOL, CEDARTOWN, GEORGIA

Transported		Nontransported	
Number	Score	Number	Score
1	126	1	145
2	123	2	117
3	111	3	115
4	109	4	114
5	106	5	110
6	104	6	105
7	101	7	100
8	100	8	96
9	92	9	96
10	84	10	92
11	82	11	87
		12	83
		13	83
		14	79
		15	63
		16	61
Median	104		96
Mean	104		97
S. D.	13.70		20.70
S. E. M.	4.12		5.18

a standard deviation of 6, and a standard error of the mean of 0.

Nontransported.--The measures obtained in "school marks" by the eleventh grade nontransported pupils, a median of 78, a mean of 82.05, a standard deviation of 7.75, and a standard error of the mean of 1.94.

TABLE 106

COMPARISON OF DATA OBTAINED BY THE TRANSPORTED AND
NONTRANSPORTED PUPILS PERSONALITY TEST
TOTAL TEST ELEVENTH GRADE

Group	Personality Total Test	Mean	Sigma	S.E.M.	Sigma M ₁ M ₂	Diff. of Mean	"t"
Transported		104	13.70	4.12			
Non	Personality						
Transported	Total Test	97	20.70	5.18	6.62	7.00	1.06

Comparative Data and "t" Ratio as Indicated in Table 108.--The measures obtained "school marks" by the eleventh grade transported pupils, a median of 73.00, a mean of 73.00, a standard deviation of 0, and a standard error of the mean of). The measures obtained in "school marks" by the eleventh grade nontransported pupils, a median of 78, a mean of 82.05, a standard deviation of 7.75, and a standard error of the mean of 1.94. There was a significant difference between the transported and nontransported pupils in favor of nontransported, a standard deviation of two means of 1.94, a difference of two means of 9.05, and a "t" score of 4.66. The average grade of the transported pupils was "c". The average grade of the nontransported pupils was "B".

TABLE 107

"SCHOOL MARKS" FOREIGN LANGUAGE ELEVENTH GRADE
CEDAR HIGH SCHOOL, CEDARTOWN, GEORGIA

School Marks "Averages"	Transported		Nontransported	
	Number	Per cent	Number	Per cent
96-100	0	0	0	0
91-95	0	0	0	0
86-90	0	0	0	0
81-85	0	0	1	20.00
76-80	0	0	2	40.00
71-75	3	100.00	2	40.00
66-70	0	0	0	0
61-65	0	0	0	0
56-60	0	0	0	0
51-55	0	0	0	0
46-50	0	0	0	0
41-45	0	0	0	0
Total	3	100.00	5	100.00
Median	73.00		78.00	
Mean	73.00		82.05	
S. D.	0		7.75	
S. E. M.	0		1.94	

TABLE 108

COMPARISON OF "SCHOOL MARKS" OBTAINED BY THE TRANSPORTED
AND NONTRANSPORTED PUPILS ELEVENTH GRADE FOREIGN LANGUAGE
CEDAR HIGH SCHOOL, CEDARTOWN, GEORGIA

Group	Foreign Language	Mean	Sigma	S. E. M.	Sigma M ₁ M ₂	Diff. of Mean	Diff. of "t"
Transported		78	0	0			
Non- Transported	Foreign Language	82.05	7.75	1.94	1.94	9.05	4.66

Transported.--The measures obtained by the eleventh grade transported pupils from "school marks" in vocational subjects, a median of 78, a mean of 82.55, a standard deviation of 7.85, and a standard error of the mean of 2.36.

Nontransported.--The measures obtained by the eleventh grade nontransported pupils from "school marks", in vocational subjects, a median of 78, a mean of 82.05, a standard deviation of 7.75, and a standard error of the mean of 1.94.

Comparative Data and "t" Ratio as Indicated in Table 110.--The measures obtained by the eleventh grade transported pupils from "school marks" vocational subjects, a median of 78, a mean of 82.55, a standard deviation of 7.85, and a standard error of the mean of 2.36. The measures obtained by the eleventh grade nontransported pupils from "school marks", in vocational subjects, a median of 78, a mean of 82.05, a standard deviation of 7.75, and a standard error of the mean of 1.94. There was no significant difference between the transported and nontransported pupils, a standard deviation of the two means of 3.06, a

TABLE 109

"SCHOOL MARKS" VOCATIONAL SUBJECTS ELEVENTH GRADE
CEDAR HIGH SCHOOL, CEDARTOWN, GEORGIA

"School Marks " Averages	Transported		Nontransported	
	Number	Per cent	Number	Per cent
96-100	1	9.09	1	6.25
91-95	2	18.18	2	12.50
86-90	0	0	2	12.50
81-85	1	9.09	2	12.50
76-80	6	54.54	7	43.75
71-75	1	9.09	1	6.25
66-70	0	0	1	6.25
61-65	0	0	0	0
56-60	0	0	0	0
51-55	0	0	0	0
46-50	0	0	0	0
41-45	0	0	0	0
Total	11	99.99	16	100.00
Median	78.00		78.00	
Mean	82.55		82.05	
S.D.	7.85		7.75	
S. E. M.	2.36		1.94	

difference of the mean of .50 and a "t" score of .16. The average grade for transported pupils and nontransported pupils was "B".

TABLE 110
COMPARISON OF "SCHOOL MARKS" OBTAINED BY THE TRANSPORTED AND
NONTRANSPORTED PUPILS ELEVENTH GRADE VOCATIONAL SUBJECTS
CEDAR HIGH SCHOOL, CEDARTOWN, GEORGIA

Group	"School Marks"		Sigma	S.E.M.	Sigma Diff. of		
	Vocational Subjects	Mean			M ₁ M ₂	Mean	"t"
Transported		82.55	7.85	2.36			
	"School Marks"				3.06	.50	.16
Non-Transported	Vocational Subjects	82.05	7.75	1.94			

Transported.--The measures obtained by the eleventh grade transported pupils from "school marks" in English, a median of 78, a mean of 78.00, a standard deviation of 8.65, and a standard error of the mean of 2.61.

Nontransported.--The measures obtained by the eleventh grade non-transported pupils from "school marks" in English, a median of 73.00, a mean of 74.90, a standard deviation of 7.05, and a standard error of the mean of 1.76.

Comparative Data and "t" Ratio as Indicated in Table 112.--The measures obtained by the eleventh grade transported pupils from "school marks" in English, a median of 78, a mean of 78, a standard deviation of 8.65, and a standard error of the mean of 2.61.

The measures obtained by the eleventh grade non-transported pupils from "school marks" in English, a median of 73.00, a mean of 74.90, a standard deviation of 7.05, and a standard error of the mean of

TABLE 111

"SCHOOL MARKS" ENGLISH ELEVENTH GRADE
CEDAR HIGH SCHOOL, CEDARTOWN, GEORGIA

"School Marks" Averages	Number Transported	Per cent	Number Nontransported	Per cent
96-100	1	9.09	0	0
91-95	0	0	0	0
86-90	1	9.09	1	6.25
81-85	1	9.09	3	18.75
76-80	4	36.36	3	18.75
71-75	2	18.18	5	31.25
66-70	1	9.09	2	12.50
61-65	1	9.09	2	12.50
56-60	0	0	0	0
51-55	0	0	0	0
46-50	0	0	0	0
41-45	0	0	0	0
Total	11	99.99	16	100.00
Median	78.00		73.00	
Mean	78.00		74.90	
S. D.	8.65		7.05	
S. E. M.	2.61		1.76	

1.76. There was no significant difference between the transported and nontransported pupils, a standard deviation of two means of 3.15, a difference of the means of 3.10, and a "t" score of .98. The average grade for transported and nontransported pupils was "B".

TABLE 112

COMPARISON OF "SCHOOL MARKS OBTAINED BY THE
TRANSPORTED AND NONTRANSPORTED PUPILS
ELEVENTH GRADE ENGLISH
CEDAR HIGH SCHOOL, CEDARTOWN, GEORGIA

q	Group	"School Marks"	Mean	Sigma	S.E.M.	Sigma M ₁ M ₂	Diff. of	
		English					Mean	"t"
	Transported		78.00	8.65	2.61			
		"School Marks"				3.15	3.10	.98
	Non- Transported	English	74.90	7.05	1.76			

Transported.--The measures obtained by the eleventh grade transported pupils from "school marks" in history and social studies, a median of 78.00, a mean of 73.90, a standard deviation of 4.90, and a standard error of the mean of 1.48.

Nontransported.--The measures obtained by the eleventh grade nontransported pupils from "school marks" in history and social studies, a median of 73.00, a mean of 69.85, a standard deviation of 7.25, and a standard error of the mean of 1.81.

Comparative Data and "t" Ratio as Indicated by Table 111.--The measures obtained by the eleventh grade transported pupils from "school marks", in history and social studies a median of 78.00, a

TABLE 113

"SCHOOL MARKS" HISTORY AND SOCIAL STUDIES
CEDAR HIGH SCHOOL, CEDARTOWN, GEORGIA
ELEVENTH GRADE

Averages	Transported		Nontransported	
	Number	Per cent	Number	Per cent
96-100	0	0	0	0
91-95	0	0	0	0
86-90	0	0	0	0
76-80	5	45.45	4	25.00
71-75	4	36.36	5	31.25
66-70	1	9.09	3	18.75
61-65	1	9.09	2	12.50
56-60	0	0	1	6.25
51-55	0	0	1	6.25
46-50	0	0	0	0
41-45	0	0	0	0
Total	11	99.99	16	100.00
Median	78.00		73.00	
Mean	73.90		69.85	
S. D.	4.90		7.25	
S. E. M.	1.48		1.81	

mean of 73.90, a standard deviation of 4.90, and a standard error of the mean of 1.48.

The measures obtained by the eleventh grade nontransported pupils from the "school marks" in history and social studies, a median of 73.00, a mean of 69.85, a standard deviation of 7.25, and a standard error of the mean of 1.81. There was no significant difference between the transported and non-transported pupils. The average grade for transported pupils was a grade of "C". The average grade for nontransported pupils was a grade of "D".

TABLE III

COMPARISON OF "SCHOOL MARKS" OBTAINED BY THE
TRANSPORTED AND NONTRANSPORTED PUPILS
ELEVENTH GRADE HISTORY AND SOCIAL STUDIES
CEDAR HIGH SCHOOL, CEDARTOWN, GEORGIA

Group	"School Marks" History and Social Studies							
		Mean	Sigma	S.E.M.	Sigma M ₁ M ₂	Diff. of Mean	"t"	
Transported		73.90	4.00	1.48				
Non- Transported	"School Marks" History and Social Studies	73.00	7.25	1.81	2.34	4.05	1.73	

Transported.-- The measures obtained by the eleventh grade transported pupils from "school marks" in science, a median of 73.00, a mean of 76.35, a standard deviation of 9.45, and a standard error of the mean of 3.15.

Nontransported.--The measures obtained by the eleventh grade nontransported pupils from "school marks" in science, a median of

TABLE 115

"SCHOOL MARKS" SCIENCE ELEVENTH GRADE
CEDAR HIGH SCHOOL, CEDARTOWN, GEORGIA

Averages	Number	Transported	Nontransported	
		Percent	Number	Per cent
96-100	1	11.11	0	0
91-95	0	0	0	0
86-90	0	0	0	0
81-85	1	11.11	3	18.75
76-80	2	22.22	2	12.50
71-75	3	33.33	6	37.50
66-70	1	11.11	2	12.50
61-65	1	11.11	2	12.50
56-60	0	0	1	6.25
51-55	0	0	0	0
46-50	0	0	0	0
41-45	0	0	0	0
Total	9	99.99	16	100.00
Median	73.00		73.00	
Mean	76.35		73.30	
S. D.	9.45		7.20	
S. E. M.	3.15		1.80	

73.00, a mean of 73.30, a standard deviation of 7.20 and a standard error of the mean of 1.80.

Comparative Data and "t" Ratio Indicated in Table 116.--The measures obtained by the eleventh grade transported pupils from "school marks" in science, a median of 73.00, a mean of 76.35, a standard deviation of 9.45, and a standard error of the mean of 3.15.

The measures obtained by the eleventh grade nontransported pupils from "school marks" in science, a median of 73.00, a mean of 73.30, a standard deviation of 7.20, and a standard error of the mean of 1.80. There was no significant difference between the transported and nontransported, a standard deviation of two means of 3.63, a difference of the mean of 3.05, and a "t" score of .84. The average grade for transported and nontransported pupils was "C".

TABLE 116

COMPARISON OF "SCHOOL MARKS" OBTAINED BY
TRANSPORTED AND NONTRANSPORTED PUPILS
SCIENCE ELEVENTH GRADE
CEDAR HIGH SCHOOL, CEDARTOWN, GEORGIA

Group	"School Marks" Science	Mean	Sigma	S.E.M.	Sigma M ₁ M ₂	Diff. of Mean	"t"
Transported		76.35	9.45	3.15			
Non- Transported	"School Marks" Science	73.00	7.20	1.80	3.63	3.05	.84

CHAPTER III

SUMMARY AND CONCLUSIONS

Summary.--The problem was to get a comprehensive picture of the status and differences, if any, of the personality traits, intelligence, school achievement and test performance of transported and nontransported pupils in the Lyles Elementary School, Cedar Hill Elementary School and Cedar Hill High School, Cedartown, Georgia, 1959-1960.

The method of research used was the Descriptive-Survey Method of research, employing test scores, school marks, and statistical analysis of the data.

The purpose of this study was to determine the relationship, if any, between the transported and nontransported on these factors: (a) achievement, (b) personality, (c) intelligence and (d) school marks. These data, in turn, have been used to test the null hypothesis that: No real difference existed between the transported and nontransported in achievement, personality, intelligence, and "school marks".

Definition of terms.--The significance of the basic terms used in the study were:

1. The term "achievement" referred to the accomplishment of the production of the children in his school work.
2. The term "personality" referred to an individual's total behavior in a social situation.

3. "Intelligence" is referred to the general capacity of an individual to adjust his thinking to new requirements.
4. The term "school mark" referred to the teacher's estimate of progress of quality of work of the pupils.

The statistical treatment of the data has led to the assumption that the null hypothesis was found valid in the analytical situation of the achievement test results, personality test results, intelligence test results, and the report cards of the one hundred twenty-five pupils studies at the Lyles Elementary School, Cedar Hill Elementary School, and the Cedar Hill High School in Cedartown, Georgia.

Procedural Steps in the Research

Procedure.--Procedural steps in the research were:

1. Related literature was reviewed.
2. Permission to do this was obtained.
3. The three tests: California Achievement, California Personality, and Intelligence were administered.
4. The average of "teacher's Marks" were computed.
5. Statistical measures to be used in this study were mean, median, standard deviation, standard error of the mean, and the "t" score.
6. The findings as developed through this analysis of the data were incorporated into the thesis copy.
7. The conclusions, implications, recommendations formulated through the interpretation of the data were incorporated in the final thesis copy.

SEVENTH GRADE

Findings Transported and Nontransported.--

1. There was no significant difference in the achievement of the seventh grade transported and nontransported pupils on test of reading, language, and arithmetic.
2. There was no significant difference between the seventh grade transported and nontransported pupils on the test of Social Studies Part I Test I, American Heritage, which was in favor of the nontransported pupils.
3. There were no significant differences between the seventh grade transported and nontransported pupils on intelligence in favor of the nontransported pupils.
4. There were significant differences between the seventh grade transported and nontransported pupils performance on the test of Social Studies Part I Test II, People of other Lands, was in favor of the transported pupils.
5. There were no significant differences between the seventh grade transported and nontransported pupils on the Social Studies Part II and Part III of the California Social and Related Science Test.
6. The data revealed only in personal adjustment were there any significant differences on the test of

personality which was in favor of the seventh grade transported.

7. The data revealed that significant differences existed between the seventh grade transported and seventh grade nontransported in spelling which is in favor of the nontransported pupils. All other school marks, there were no significant differences.

Ninth Grade

Finding.-- Transported and nontransported.

1. There were significant differences between the ninth grade transported and nontransported pupils in language which were in favor of the nontransported.
2. There were significant differences between the ninth grade transported and nontransported pupils on Part II Test I and Part III Test II of the California Social and Related Science Test in favor of the transported pupils.
3. No significant differences were found between the ninth grade transported and nontransported pupils on personality tests, the tests of reading, arithmetic and Part I of the Social Studies Test.
4. No significant differences were registered among the ninth grade transported and nontransported pupils in "school marks."

Eleventh Grade

Findings.--Transported and nontransported

1. The data revealed that there were significant differences between the eleventh grade transported and nontransported pupils in the area of social adjustment of Personality Test which were in the favor of the transported.
2. The data revealed that there were significant differences between the eleventh grade transported and nontransported pupils in foreign language which were in favor of the nontransported pupils.

Implications for Educational Theory and Practice.-- The findings, conclusions, and implications provide for the following recommendations:

1. That all teachers place more emphasis on teaching and learning of basic facts in all subject matter areas.
2. A greater emphasis should be placed upon the overall improvement of the teacher's effort throughout the school in order that those pupils who will graduate will have equal opportunities for successful achievement.
3. That the Board of Education study the time element of transported children (remaining after school has been dismissed until 5:00 o'clock in the afternoon before going home.)
4. That the people who live a long distance from the school if not home owners move closer to town. (bus going 8 or 9 miles to pick up one or sometimes two children)
5. That the Board of Education make some provision of the pupils who live in the isolated areas.

6. That a complete testing program be established in the elementary and high school for the purpose of testing achievement to be given at the close of the semester and at the close of the school year.
7. That science and mathematics be standard courses each year and not electives for pupils going to college.
8. That in-service study be given the best ways of raising the general reading level of the pupils through development, corrective and remedial services.
9. That the curriculum be revised so that mathematics and science will be included each year.
10. That the teachers go to school.
11. That further research be carried on in the transportation of students, as to the effect, on personality, achievement, intelligence and "school marks."

Conclusions.--

1. It appears that the transported and nontransported (groups) were on about the same age level.
2. It would appear that both the transported and nontransported groups possessed similar mental ability as far as total mental factors are concerned.
3. It would appear that (both groups) experienceing similar accomplishment in total school achievement.
4. It would appear that neither transported nor nontransported groups held an advantage or disadvantage with

reference to total personal adjustment.

5. It would appear that there were no significant difference in 'school marks.'

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